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> تأليف إبر َاهيم خوري

الجلدالثايي



التهام التهام التوزيع) الدراسات والنشر والتوزيع) دوشق ــ سورية







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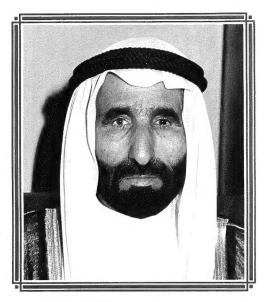
مشعره المسلامي

عاوية الإختصار في أصول علم البحسار مترجّه تلها الإنكليزية وَترجّهَ وَالسفاليّة عنية وغيلادة وجهة

ابراهسيم خوري

سِيْ لَسُّيْلَةُ لِلْكِلَا كَتِرِ الْعَيَّاتِيَةِ لِفَلْكِيَةِ





صَامِبُ لِعَيْدِ مِوْلِفَيْدِ مِعْ مِعْ بْنَ كِحْمَدُ لِلْقَالِدِ مِنْ مُعْ مِلْكُ مُدِينًا مُعْدِينًا مُعْدِي



سِبِ جو الْسَيْبِ بِخ جَالِ رُبُنَ عَبْقِ زُلِلْقَاكِ بِيَّ وَلَمْتِ الْمَسَةِدَ وَسَانِبِ الْمَاكِمِ



تصلير

يأتي اصدار تصانيف أحمد بن ماجد في جزئين لشعره الملاحي وجزء لنثره ، ضمن سلسلة الملاحة العربية الفلكية ، من اصدارات كتاب الابحاث لمركز الدراسات والوثائق برأس الخيمة ، خطوة علمية جديدة في احياء مؤلفات عالم البحار العربي ، ابن مدينة جلفار التاريخية في دولة الامارات العربية المتحدة .

وتتمثل أهمية هذه التصانيف في كونها تشمل جانباً واسعاً من اراجيز ابن ماجد وقصائده العلمية ، سواء منها ما يتحدث عن علم الملاحة وتجاربه ، أو عن علم الفلك وقياساته ، أو عن علم الجغرافية واكتشافاته . وكلها علوم ومعارف ما يزال البحارة يستفيدون منها في اسفارهم وتنقلاتهم بين موانىء الحليج العوبي والبحر الأحمر وموانىء المحيط الهندي عامة .

لقد عمد المركز ، بتوجيات سامية من صاحب السمو الشيخ صقر بن محمد القاسمي ، حاكم امارة رأس الخيمة ، ويمتابعة من سمو الشيخ خالد بن صقر القاسمي ، ولي العهد نائب الحاكم ، وباشراف سمو الشيخ سعود بن صقر القاسمي رئيس الديوان الأميري ، الى البحث والتنقيب عن كتب ابن ماجد ومؤلفاته الشعرية والنثرية ، اضافة الى جمع ما كتب عنه من دراسات وابحاث سواء كانت باللغة العربية (وهي قليلة) أو باللغات الاجنبية (وهي الأكثر أهمية) ، كذلك اقتنى مركز امارة رأس الخيمة خطوطات ابن ماجد أو مصوراتها ليحيط بكل ما يتعلق بهذا العالم الجليل من علوم ونظريات وغترعات وتحقيقها ودراستها ونشرها وفق الاصول العلمية .

وفي هذا السبيل يقوم تعاون مثعر بيننا وبين عدد من الاساتلة الاجلاء ، ومع الجهات العلمية المهتمة بهذا الشأن . فكان انجاز هذه السلسلة التي بدأناها بكتاب (أحمد بن ماجد منظر الملاحة الفلكية في المحيط الهندي ويحاره الشاطئية في المقرن التاسع الهجري / الخامس عشر الميلادي) ثم هذه الاجزاء الثلاثة ، بالتعاون مع الاستاذ الباحث والمحقق ابراهيم خوري ، الذي له باع طويل في العلوم المبحرية والفلكية وفي مؤلفات ابن ماجد على وجه الخصوص . والعمل جار لانجاز طباعة عدد آخر من الكتب التي تبحث بعلوم ابن ماجد وانجازاته .

وأملنا كبير أن يجد القارىء العربي في هذه الاصدارات العلمية المراجع التي طالما افتقدتها المكتبة العربية عن عالم من أشهر علماء العرب في الغرب ، وعن علوم نهل منها الفكر الأجنبي في مسيرته الحضارية العلمية المتزايدة .

والله ولي التوفيق

احمد جلال التدمري مدير مركز الدراسات والوثائق

مقدمة عامة

آلينا على انفسنا ان ننشر تباعا تصانيف العلوم البحرية عند العرب ، لتتوفّر للباحثين نصوص صحيحة يعملون على اساسها . فجاء هذا الجزء ثانيا في ترتيبنا ، وضمناه بعض شعر ابن ماجد الملاحي . ونأمل ، بعون الله ، ان ننجز اصدار باقي الاجزاء في مستقبل قريب .

وقد قدّمنا شعر ابن ماجد على نثره ، لأن الشعر ديوان العرب ، ولأن شعره ديوان علمه الغزير وتجاربه الفريدة ، وابتكاراته الجديدة في علم البحر ، وديوان ما كتب قبله في الملاحة البحرية عند سائر العرب ، وعند الشعوب القاطنة في سواحل بحر الهند من زنج وشوليان وغيرهم . وليس نثره سوى شروح وتعليقات ، مجموعة في كتاب تارة ، ومتفرقة في وريقات احيانا اخرى (الفصول) ، اراد بها توضيح بعض نظمه الذي استعصى فهمه على بعض المعالمة المعاصرين له ، أو خشي ان يستعصى في مستقبل الايام على بعض قرّائه من ربابنة او باحثين .

وأحمد بن ماجد رائد وبالشعر العلمي الملاحي، و بالملاحة العلمية في الشعر ، على الرغم من تقصيره الصارخ ، باعترافه ، في سلامة اللغة احيانا ، وفي سلامة الاوزان احيانا اخرى . فلم يسبقه احد من العرب ، ولا حتى من العجم او الهنود او الفرنج ايضا ، الى تصنيف مبادىء علم بحر عصره وما قبل عصره ، بترامها وكيالها ، نظيا في عدة بحور شعرية ، وفي ابيات تجاوز عدد ما نعرفه منها ٣٠٦٣ ابيات ، وصلت الينا في ٢٤ ارجوزة وقصيدة ، تشتمل اطولها على ١٠٨٢ بيتا ، واقصرها على ١٣٨٢ بيتا ، واقصرها على ١٣٨٢ بيتا ، ولابن ماجد كثير من الاراجيز والقصائد الملاحية ما تزال مفقودة حتى الأن ، نامل ان يعثر اهل العلم عليها عاجلا او آجلاً .

وبالله التوفيق

ابراهيم خوري

تمهيد

لم اضمن كتابي السابق تحليلًا لما نشره الباحثون العرب من مقالات أو كتيبات صغيرة عن أحمد بن ماجد وعن تآليفه ـ باستثناء ـ ما يتعلّق منها بمواقفهم من قضية الارشاد الزائفة . وارجأت بحث هذه الدراسات العربية إلى كتاب مستقلً لاحق سوف اصدره بعد طبع نصوص ابن ماجد المحققة ووضعها بين أيدي القراء وأهل الفكر . وفي كلمة لا بدّ من قولها بشأن تحقيقها وتحليلها .

أولاً - تحقيق تصانيف ابن ماجد

خرجت في نشرها على «شبه عرف» ابتدعه المستشرقون فرّان وشوموفسكي وتيبتر . فالأول صوّر تصويراً نخطوطة باريس واعتمد عليها في كل ما كتب . وصوّر الثاني تصويراً أيضا نخطوطة لينغراد، وترجمها إلى اللغة الروسية . وتبنى الثالث ترجمة كتاب الفوائد في أصول علم البحر والقواعد إلى الانكليزية عن نخطوطة باريس على علاتها . وهذا يعني ان جميع أبحاث هؤلاء المستشرقين ارتكزت على نصوص يشوبها التحريف والتصحيف وأخطاء النساخ والاغلاط النحوية واللغوية التي يحتمل احتمالاً فقط ان يكون ابن ماجد قد وقع فيها في أثناء تصنيفه كتبه ، ويعود كثير منها الى ضعف ثقافة النساخ ، فشوّهت بالتالي تشويهاً خطيراً الملاحة العربية المعروضة فيها ، لا سيها ان جميع المخطوطات المعروفة تنطوي على اسقاطات متفاوتة الحجم والعدد ، لكنها تكمل بعضها منى حققت .

وتلافيت هذا المنحى الخاطىء ومضاعفاته بتحقيق كتب ابن ماجد، واتبعت فيه القواعد التي وضعها السلف الحكيم. ولما لم تتوفر حتى الآن نسخة بخط المؤلف لا يجوز الجدل في نصها، ولا نسخة مقروءة عليه لها القيمة ذاتها تقريبا ، تمتم علي تعليق طريقة مقارنة النسخ الموجودة وتثبيت نقاط التباين بينها في الحواشي ، وتخليص نصها من شتى الاخطاء ، جهد المستطاع ، اعتادا على الاستقراء والاستنتاج والسياق الخ ، وعلى خبرتي الطويلة في التحقيق ومطالعني الكتب المحققة . وتنوّعت بعض التفاصيل في منهجي حسب مقتضيات الحال في الحلوية أولاً ، ثم في كتاب الفوائد ثالثاً الحالية ، وأبدأ الآن بما يخص الحاوية المنشورة في هذا الجزء الثاني من سلسلة وأخيراً . وابدأ الآن بما يخص الحاوية المنشورة في هذا الجزء الثاني من سلسلة برأس الحيمة باشراف سمو الشيخ سعود بن صقر القاسمي ، رئيس الديوان الاميري . وسوف اشرح منهج تحقيق الاراجيز والقصائد ثم منهج تحقيق كتاب الفوائد في الوقت المناسب في مطلع الجزئين الثالث والرابع .

أ - تقديم شعر ابن ماجد الملاحي على نثره

وقلمت شعر ابن ماجد الملاحي على نثره ، لأن شعره أصل ونثره فرع : فللعروف من اراجيزه وقصائده يموق كثيراً نثره من ناحية «كمية» النص المكتوب ، ومن جهة «كمية» المعارف المعروضة . وابن ماجد هو القائل :

قصدي الأصول في علم البحر لاقصدي الهرج وكثر الشعر" وهذا يعني صراحة ان اكثاره من الشعر لا يتوخّى الافراط في الكلام ، بل استعراض مبادىء الملاحة . وابن ماجد هو القائل أيضا عن مضمون كتاب الفوائد : ووفيه ما اشتبه من الحاوية والاراجيز وغيرها على الطالبين، " . وهذا يعني ان كتاب الفوائد شرح للحاوية والاراجيز والقصائد ، لا علم قائم بذاته .

⁽١) الحارية، الفصل ١١، البيت ٧٥.

⁽٢) كتاب الفوائد، طبعة مركز الدراسات والوثائق، ص ٢٠، س ١٠

ب ـ تصدير شعر ابن ماجد الملاحي بالحاوية

وصدّرت شعر ابن ماجد بالارجوزة الحاوية ، لأنها وحدها تحوي ملاحته كاملة ، وان كانت مكّثفة . وقد قوّمها هو نفسه ، وقال عنها :

وحاوية العلم النفيس افادها ليجري عليها كل آت وذاهب (١) واوضح ما يقصد بالعلم النفيس في صلب الحاوية عندما حدّد موضوعها في شعرها ، فقال :

يا أيها الطالب علم اليم إليك نظها يا له من نظم في العلم والهيشة والحساب وما هنو استنبط للصواب؟ ومياها كتابا بصراحة كلية فقال:

لا تـأخـذ الصفـات من كتابي إلا صفات الصدق والصـواب وقسمها الى احد عشر فصلا ، وحدّد موضوع كل فصل في عنوانه . لذلك كله افردنا للحاوية جزءاً خاصاً بها . وبدأنا أعهالنا بتحقيقها وتحليلها .

جــ النسخ المعتمدة في تحقيق الحاوية

واعتمدنا في تحقيقها على ثلاث نسخ ، مكّنت مقارنتها من تحديد عدد أبياتها الـ ١٠٨٦ ، ومن تعين عدد أبيات كل فصل منها مثلها جاء في الفقرة ٧٩ منها . واكتشفنافيها ثهائية أبيات منحولة . هي البيت ١٠٧ من الفصل الرابع ، والأبيات ٦٣ ، ٢٦ ، ١٠٦ ، ١٣٠ من الفصل الخامس ، والبيت ٦٣ من الفصل التاسع .

وهذه النسخ هي :

التاجرية ، وتشغل الحاوية الأوراق ٢٠٧ إلى ٢٣٨ منها ، وخطها نسخي ،
 ولا تحوى كل الأبيات .

⁽١) الذهبية ، البيت ١٥٤ .

⁽٢) الحاوية ، الفصل الأول ، البيتان ٢و٧ .

⁽٣) الحاوية ، الفصل الأول ، البيت ٣٦ .

- لظاهرية ، وتشغل الحاوية الأوراق ١٠٠ إلى ١٢٦ منها ، وخطها نسخي ،
 ولا تحوى كل الأبيات .
- ٣ـ الباريسية ، وتشغل الحاوية الأوراق ٨٩ إلى ١١٧ منها ، وخطها نسخي ، ولا تحوي كل الأبيات .
 - د_ منهج التحقيق
- ١ ـ جعلنا التاجرية أصلاً أولاً ، وقارناها بالظاهرية والباريسية وابنا الفروق اللفظية بينها في الحواشي .
- ٢ ـ والمحنا إلى كل نقص أو زيادة في كل نسخة ،لا سيها في الظاهريةوالباريسية .
- ٣ ـ وصححنا الأخطاء اللغوية متى أمكن دون تغيير المعنى مثل نصب الفاعل أو
 جرّه ورفع المفعول وتذكير المؤنث وتأنيث المذكر الخ.
- ع. وقومنا استعمال الضيائر متى تيسر : مثل ضمير الجمع (هم) بدل ضمير المثنى
 هما أو الضمير هير .
 - ٥ ـ وصححنا اغلاط املاء المفردات وتحريفاتها وتصحيفاتها .
- ٦ ـ وحذفنا الزيادات في اشطر الأشعار ، المخالفة للوزن ، دون تغيير المعني .

ثانياً - تحليل الحاوية

ولم نبدل شيئا من الحاوية ، لكننا حلّنا فصولها إلى فقرات موقّمة من ١ إلى مد نعم فيها ابن ماجد عن فكرة أساسية ، ابرزناها له ضمن قوسين معقوفتين مسبوقتين برقم متسلسل مستقل عن أرقام الأبيات ، اشارة إلى انها خارجة كليا وتماما عن نصّه وكتابته . وتوّخينا بهذا الأسلوب بجاراة الأبحاث المعاصرة التي تساعد القارى، أو الباحث في العثور بسهولة على ما يريده ، وفي ايجاد الاستشهادات اللازمة له ، وفي تكوين تصوّر شامل عن التسلسل المنطقي السليم في الحاوية . وهذا يعني مساعدة القارى، في ادراك الكليات والجزئيات .

وانطلقنا في هذا التحليل المستقل كليا عن النص المحقق المحافظ عليه أصولا ، من فكرة ابن ماجد نفسه الذي يجزم ان الحاوية تتضمن علم البحر الملاحي جملة وتفصيلاً ، فأبنا تصوره العام وتفاصيله الدقيقة دون المس بالنص الأصلى المحقق .

ثالثاً _ ترجمة الحاوية والسفالية الى الانكليزية

ودفعنا التفافل عن هذه الحاوية ، والتغاضي عن قيمتها الحقيقية ، الى نقلها الى الانكليزية ، ليستفيد من ترجتها جميع الذين تهيبوا الاقتراب من شعر ابن ماجد ، أو استعصى عليهم فهم معانيه . وأقنعنا تشويه كتاب الفوائد ، في ترجمته الانكليزية ، بضرورة نشر النصوص الملاحية العربية باحدى اللغات الاوربية . وترسخت هذه الفكرة في ذهننا بعد حضورنا مؤتمر لشبونة عن التوسع البرتغالي في العالم ، واطلاعنا على الأفكار الخاطئة المبنية على ترجمة السفالية الروسية والبرتغالية . فنقلنا السفالية الى الانكليزية ايضاً ، وصححنا ما وجب تصحيحه فيها ، وطبعها لنا مركز الدراسات الكرتوغرافية القديمة ولجنة الأبحاث العلمية لما وراء البحار في جامعة كويمبرة (١٩٨٣) . فادخلنا ترجمتها في هذا الجزء ، ليطلع عليها من فاته الحصول على نسخة منها بعد ان نفدت بسرعة خلال عام طبعها

أخيراً تبين ان نشر أبحاث عن ابن ماجد باحدى اللغات الاوربية اثار فضولًا علمياً جديداً حث بعض الباحثين على ترجمة شعره الملاحي لتكون معلوماته في متناول الذين لا يجيدون اللغة العربية . ونحن ندقّق الأن ترجمة فرنسية لبعض أراجيزه ، اجراها باحث فرنسي شاب ، وسوف ينشرها في أواخر هذا العام .

اذن يحوي هذا الجزء الثاني ملاحة أحمد بن ماجد ، كاملة غير منقوصة ، حسبها صرّح هو بالذات في مناسبات عديدة ، في أصلها العربي ، وفي ترجمتها الانكليزية ، حفظاً لمعانيها من التزييف والتشويه عند نقلها الى لغة اخرى . والدرجنا فيه ايضاً ترجمة السفالية ، ثانية اراجيزه بالطول (سبع مائة بيت وبيت) وبالأهمية ، مقسمة الى فصول وفقرات على غرار الحاوية ، لهدم كل ما بناه عليها المستشرقون من نظريات خاطئة عن الملاحة العربية . وأرجأنا النص العربي الى الجزء الثالث ووضعناه في أوله . وخصصنا كتاب الفوائد بالجزء الرابع . وبذا نكون قد نقيدنا حرفياً بمخطط ابن ماجد : فالحاوية تتضمن ملاحته مكثفة ، وتترسع باقي الاراجيز والقصائد في أفكار الحاوية المكثفة . ويشرح كتاب الفوائد ما ظن ابن ماجد انه يحتاج الى شيء من الايضاح في نظمه وشعره .

الارجوزة الاولى

حاوية الاختصار في اصول علم البحار بسم الله البدين الرعم

[وبه نستعين]^(۱)

1 [الحمد لله]

الحمدُ لله على حُسن توفيقه ، وإلهام الحقّ بتحقيقه ، والهداية الى البحر وطريقه " ، ونَصره في تَغريب القُلك وتَشريقه . أحمده على معرفة ألهمناها وأمدّها السلسبيل البحر منه ورحيقه ، وقصاحة تدهشُ بليغ اللفظ ومنطيقه " ، والصلاة والسلام على النبي الأمّيّ ، [وعلى آله وصحبه] " وفريقه .

2 [تصنيف الحاوية للهداية وحفظ العلم]

أَمَا بِعِدُ، خُذِ التواضِعَ وهَزْله، ورقيقَ اللفظ وجزله، فإنَّ التصنيفُ لمثلِ^(١) هذه الْأرْجوزة زكاةُ الافهام، [وتجديد سرّ درسته الليالي]^(١) والأيَّام، أَقْبلت بي اليها طاعةُ ملك [الأملاك ومُدَبِّرً]^(١) العالم^(١) والأفلاك، لقوله، جلَّ من قائل وصَلَق:

⁽١) زيادة من ب وظ .

⁽٢) ψ ، ظ : والهداية لاسباب الخير وطريقه . (٦) ψ : قان هذه التصانيف كمثل ، البديل من

⁽٣) ت : واحدها . التصويب من ب ، ظ . ب ، ظ

 ⁽٤) ب، ظ: ووجيزة . (٧) ت: معالم ، التصويب من ب، ظ.

وعلامات وبالنجم هم يهتدون . فتحقَّقَتْ ظنونيْ"، وشاهد قلبي وعيوني أَنَّ فيها وبها بعدُ الله [تعالى] المداية .

ومَّا حملني الله على نظمها ، خشيتي إيقاع الجهل على البريَّة ، واندراس العلم ونزوله بساحة من ليس له فيه أَهْليَّة ، فوضعتُ " فيها [من] " الألفاظ الغريبة [والحكمة] الربانيَّة ، بمشيئة الله [تعالى] ا، ما أرجو به انشراح صدور ذوي الْأَلْباب (٥)، عندما يدهيهم من شدَّة ومصاب.

صنَّفتُها ١٠٠ مَّا سَلَك ١٠٠ في عَصْري منَ الأراجيز المُصَنَّفة ، والرَّهْمانَجَاتِ الواسعة المؤلَّفة ، الكبيرة (١٠ المقدار ، الكثيرة التردُّد والتكرار . كلُّها مستحسنة لكافَّة (١٠ الجمهور ، وهي للمضيوم "اإقالة وحضور .

وكانَ قصدى الاختصار ، وإسقاط الحَشْو من هَوْش الإكثار ، لئلا يستطيلها الملول ، ولا يتفرغ(١١٠لقرائتها المشغول .فرحمَ الله من يصفحُ عَمَّا(١١٠)يجدهُ منَ الزلل ، ويصلحُ ما فيها من خطأ وخلل.

وهي الْأَرْجوزة المُسَاَّة بـ وحاوية الاختصار في أصول علم البحار، مشتملة على أَحد عشم فصلاً ، تَصْنيف العَنْد الفقر ، المُعْتَرف [بالعجز] والتقصر ، أقلّ عباد الله وأحوجهم" الى رحمة الله العليُّ الكبير ، بقيَّة السلف ، وعمدة الخلف ، المعلِّم الشهير أحمد بن ماجد بن محمد بن عمر بن فضل بن دُويْك [بن أبي الركائب](١١) النجدي، عفا الله عنه وعنهم أجمعين(١٠٠ وهذه فصول (١١٠) الأرجوزة . وهي :

⁽١) ت: بظنوني ، التصويب من ب ، ظ .

⁽٢) زيادة من ب، ظ.

⁽۳) ت ، ب ، ظ : حل بي ، وهو تصحيف .

⁽٤) ت: فقطفت، البديل من ب، ظ. (٥) ت: شرح ذوي الالباب، البديل من

⁽١) ب، ظ: صفيتها.

⁽٧) ت : شك ، والتصويب من ب ، ظ .

⁽A) جميع الأصول: كثيرة.

⁽٩) ت: بكافة ، البديل من ب ، ظ .

⁽١٠) ت: للمطيوم، تصويب ب، ظ. (١١) ت: يقرع، البديل من ب، ظ.

⁽۱۲) ب، ظ: تصفع ما يجده.

⁽۱۴) ت: وارجاهم، البديل من ب، ظ.

⁽۱٤) ت : دويك البركاني ، والتصويب من ب ، (١٥) ب ، ظ : وعنهم وعن جميع المسلمين .

آمین . یا کافی یا شافی یا هاوی یا معین .

⁽١٦) ت: أفصال ، البديل من ب ظ ،

الفصيل الأول

الحمد والثناء على الأستاذِيْنَ ، وذكر إشارات يَحتاجُ إليها الربابين ، ممَّا لا يُجْهَلُ فضلُه " ، كالطين والحشيش والبلد والمَارزة ، [وما شايَهَ ذلك] "

3 [البسملة والحمدلة]

بصم الله البنين اليبيع

 ١ الحمدُ للخالق في الجَلالِ القَاهِر الفَرْدِ بلا مِثَال ٢ أَخْمَلُهُ خَمْداً كما هَذَاني إلى الصلاة على النبي العدناني ٣ فَنَــظْمِ تَـالْيفِ ابن كهـــلانِ
 ٤ ذوي النُهى ومُصْلحينَ الشانا وَسَهْل واللَّيثِ وَلَدْ شاذانِ زَخْسَرَفَ رَبِّي لَهُمُ الجنانا أو زائدٍ صورة لساني ه وَآسْتَغْفِرُ الله منَ النقصانِ

* * *

[●] ت: تحمد، البديل من ب، ظ.

^{**} ب ظ: لا يحمل فصل.

^{●●●} زیادہ من سے ظ

⁽١) * ب، ظ؛ الحمد اله الخالق.

⁽٣) ♦ ب، ظ: ين.

⁽٥) • ب، ظ: اللسان.

4 [تقديم الأرجوزة]

٦ يا أيُّها الطالبُ عِلْمَ اليمُّ * ٧ في العلم والهَيْئةِ والحسابِ ٨ إِنَّ كُنْتَ مُمِّن جِدًّ في العلوم ٩ يُغْنيكَ عَنْ رَهْمَانَجَاتِ النَّثْر ١٠ والشَّرطُ لا يُقْرا بــلا أُسْتَاذِ ١١ لَأَنَّ فيها الرِّمْزَ يا ابن الَّامَّ* ١٧ ويعدد ذا أوصيك بالثَّبات ١٣ ولا تُمَار قائلًا إنْ قالا ١٤ إنَّ المسائلُ بعضها فشارُ ١٥ ويَعْرِفُ المسأَلةَ الغَبيُّه ١٦ خُصَوصَ في مَسْأَلَة تَعَمَّر

إليكَ نَظْماً يا له مِنْ نَظْم وما هُوَ آسْتُنبطَ الصُّواب وَذَاكَـرَ الْأَسْتَاذَ كَـلُ يوم هذا الذي نَظَمْتُهُ بِالشَّعر إِنْ لَمْ يَكُنْ لِلفُلْكِ غير حادي • يَحَسُبُهُ الجاهلُ ضَعْفَ عِلْم ني محفل ٍ فيه ذوو الأفاتِ بَـلْ ذَاكِر الأنْدادَ والرِّجـالا وربما يعرفها الحمار مَنْ لَيْسَ يَفْهَمُها على السويّة لا أَصْلَ لها مُعْتَرَفاً يُسمَّى

5 [اشارات يحتاج اليها الربابين]

١٧ أَمًّا الذي يَسَلُ عَن المَسَافَه ١٨ أَوْ عَنْ قياسٍ صادقٍ أَوْ باشِي ١٩ أَوْ كوكب في حِسْبَةِ النَّيْرُوزِ ٢٠ أو استِسواءاتِ مُجَرِباتِ ٢١ والطُّين والحيَّاتِ والأطيار ٢٢ لا تُعْتَبِرُ إِلَّا بِمَا جَرِّبْتُهُ

أَوْ ديرَةِ البِّرِ وكِلِّ آفَهِ أَوْ مَطْلَقِ جَرَّبنَهُ المواشي أَوْ مَوْسِم عِنْدَ ذوي التَمْبِيْز فإنَّهُ الصائبُ فيما ياتي والحوت والحشيش خُذْ أَخْباري أَوْ أَنْ يَكُونَ الوصفُ قَد حَقَّقْتَهُ

⁽۲) چەپ، تا: مذا الملم.

⁽V) ♦ ب، ظ: الهمة،

هه ت: استيقظ تصويب ب، ظ.

⁽۱۰) په پ، ظ: مادي.

⁽١١) * ب، ظ: يا ابن أمى .

⁽١٣) * ت : اذكر : التصويب من ب ، ظ .

⁽١٦) * ب، ظ: لاصلها.

⁽٢١) * ت : الطير ، التصويب من ب ، ظ .

⁽۲۲) * الاصول: او يكن الواصف.

أشاير صحاح في الأفاق يَكُــذِبُ مَرَّةً ويَصِـحُ مَرُّهُ لِقَفْرِ بُحْرٍ نَازِحٍ لَا داني أشايس يعرفها الفُؤاد تَوَافَقُوا في صِحَّة الحَبَّاتُ خُصُوص بالهند [فَدَتْكَ نَفْسِي] • مُنِّنَةً فَلَيْسَ هِيْ بِالجِائِزُهِ يَعْلَمُها ذو القدرةِ القديرَه يحصلُ مِنْ طلِّ ومنْ حاياتِ• فذاكَ لا يَخْفَى على النِحْرِيْرِ مازَجَهُ الشَّهْبُ فَمِنْهُ آحذَرًا ا إعْمَلُ به في كلِّ ما تَعْتَانُ ** إِنْعَلْ بتجريبكْ ولا تُبَالِ إلا صفات الصُّدْقِ والصَّوَاب أَوْ بِرِّ مُكْرانِ بِهَشْتِ لاري ٢٢ أُمَّا وجبودُ البلد واللَّذُاقِ * ٢٤ وإنْ تَرَ اللزَّاقَ فيه الصُّفْرَه ٢٥ فَرُبُّمَا جَاءَتْ بِهِ الحيتان ٢٦ أَمَّا الذي أَيَا فتى يُصْطادُ ٢٦ ٢٧ والسقد ماء الفضائة الثقات ٢٨ مِنْ جَاهُ أَحَدُ عَشَرُ لجاهِ خَمْس ٢٩ وإنْ تَرَ في البَحْرِ يَوْماً مَارِزَه ٣٠ لَانٌ فيها لُعُساً كَثِيرَهُ ٣١ تَغَيُّرُ الْأَمواوِ في الحالاتِ ٣٢ حتى يصير الماء مثل النور ٣٣ وإنَّ رَأَيْتَ الماءَ قد تَغَيُّها ٣٤ وكلُّما جرَّبْتُ يا رُبَّانُ ٣٥ ثم صفات البر والجبال ٣٦ لا تَأْخُذِ الصفاتِ من كتابي ٣٧ كَجَوْزُراتِ في جَيَلْ جُلْنار

6 [معارف يحتاج اليها المعالمة] ٣٨ وينبغى معسرفةُ الأريساح ومُغْلَق السزاخس والمفتساح

تعتان .

⁽٣٣) ♦ ب ، ظ : مارجه الشباب فمنه الحذر . (٣٤) ، ت، ب: جريث، التصويب من ظ، * * ب : في كل ما تعنان ، ظ : في كله

⁽٣٥) * ت : قد صفا ، التصويب من ب ، ظ .

⁽٣٦) * ب، ظ: لا تأخذ، وتأخذ.

⁽٣٨) ٠ ب، ظ: البحر.

⁽٢٣) * ب، ظ: اجود البلد والارقاق. (٢٤) * ب، ظ: ويصدق.

⁽٢٥) * ت: لتعبر، البديل من ب، ظ.

⁽٢٦) * ب، ظ: يكون في اصطياد،

^{**} ب، ظ: اشارة يغرى بها الغوادي . (٢٨) * زيادة من ب، ظ، اسقاط في ت.

⁽٣٠) * ب، ظ: لفة كثيرة.

⁽٣١) * ب، ظ: حيات.

٣٩ فَغَلْفُهُ يَمْكُثُ رُبِّعَ عامِ
 إذا بدا اللَّبْرَانُ وقَّتَ الفَجْرِ
 ٣٤ حتَّى ترى الفجر آستوى بالزُّبْره
 ٣٤ مِنْ أَوَّلِ الماتين يا فطينا
 ٣٤ فهذه التسعون فيها الغلقا
 ٤٤ مِنْ مَضَض الوَحْشَةِ والتنلُّم
 ٢٤ وينبغي الحاذقُ أَنَّ لا يَغْزِمَا
 ٢٤ وينبغي الحاذقُ أَنَّ لا يَغْزِمَا
 ٢٤ وينبغي الحاذقُ الله الشديدُ

مُسلَّة تسعينَ مِنَ الْأَيْسامِ
ما ينبغي للفُلْكِ فيه يجري
فَجُرْ نواحيه معا وغزرَه
لاَوُّل الماتين والتسعينا
حقيقٌ مَنْ جَازَ بِهَا أَنْ يَشْقَى
وكَّ وَكُنُّرةِ الوسواس والتألُّم
كم جازَ فيها أحمقٌ وخاطرا
في الأربعائية قبْلَ التَّيْرَمَا
يُصَدُّ فيها الرجل المصناية المصنديدُ

7 [احتياطات ما قبل السفر]

دَهُ إِنْ تَنْجِرِ فَيها وَيكلِّ مَوْسِمِ الْمَدِيُ الْمُلَوِّ والمسارِيُ وَ وَحُسِّمِ السَّكَانِ وَ وَحَسِّرِ السَّكَانِ السَّكَانِ السَّكَانِ السَّكَانِ وَ وَجَسَّرِدِ الآلةَ قَبْسِلُ السَّفَسُرُ ٢٥ وَالبَلْكِ وَالفانوسِ والرَّهْمَانَيجُ ٣٥ وينبغي البُّعْسَدُ عَنِ الخَيلاءِ وه فاحرصْ على الجَلْسَةِ للقياسِ وه والتِينَةُ للقياسِ وه والتِينَةُ للها شدوطُ حَمَّهُ هما شدوطُ حَمَّهُ

فَلَمْ يَكُنْ دهرُك يا مُعَلَّى والبحرُ ما كانَ يُلَى [ب] الجهادِ وجُمَّةِ السركب والفتيانِ كَحُفَّةٍ أَوْ كَقِيَاسِ أَوْ حَجَرْ وإنْ تَكُنْ سَافَرْتَ كُمْ مَنْ حَجَعْ عِنْدَ كمالِ العِلْمِ والنَّهَاءِ لأنَّها للعلمِ كالأساسِ لكنَّها لنَّدَا نَبَدَأْ البالمُهمَّه لكنَّنَا نَبَدَأْ البالمُهمَّه

⁽٤٠) ≰ ب، ظ: الفلك عليه.

⁽٤٥) ♦ ت : الضرورة ، التصويب من ب ، ظ .

^{}** ت : اذا ، التصويب من ب ، ظ .

⁽٤٦) ♦ ب، ظ: الحادق، ت: العاقل.

⁽٤٧) ♦ ب، ظ: يبدو فيها الراجل.

⁽٤٨) ♦ ت : دهنك ، التصويب من ب ، ظ .

 ⁽٤٩) • ب، ظ: العدة والشاري، ت:
 الجمة والنشناري.

⁽٥١) * ت ب: قياس ، التصويب من ظ.

⁽۵۵) 🛊 ب، ظ: کسور،

^{**} ت: نبدوها، البديل من ب، ظ.

الفصيل الثاني

في المنازل والأخنان والجري عليهم ومقابلاتهم وعدد أصابعهم في السهاء وهي أصابع غير التّرفّات ومعرفة التّرفّا ، وما يتعلُّق بذلك والله أعلم

8 [منازل القمر الشامية]

١ فأولًا مَعْرِفة المنازل ٢ النَّـطُحُ والبُـطَيْنُ والثُّـرَيْـا ٣ وَهَقْعَةٌ مِنْ بَعْدِها، والهَنْعَه ٤ وجَبْهَةً وزُبْرَةً والصَّرْفَ

ه وبعُـدَهَا العَـوَّاءُ والسَّمَـاك

9 [منازل القمر اليمانية]

 والغَفْــرُ والـزُبَــانُ والإكليــلُ ٧ والقَلْبُ والشَّـوْلَـةُ والنَعَـائِمْ ٨ ثُمُّ السُّعُودُ الْأَرْبَعَه والفَرْغُ ٩ أَعْنى المُقَدَّم والمؤخِّر فافْهَمَا

وهاكها شاميّة يا سائلي والسَّنِسَرَانُ بَعْسَدُهُمْ تَهَيَّسَا ذراعُ والنَّشْرَةُ والطُّرْفُ مَعَه ما في صفاتي قطُّ لَكَ حِرُّفَه هُمْ آخرُ الشاميَّةِ الزواكي

أُوْلِي اليَمَانِيَّةِ بِا خليلُ وبَعْدَهَا البَلْدَةُ تَـطُلُعُ دائِمْ يا طال ما فُصِّلْ عليها الشَّرْعُ وتعدها الحوت سيدو فاعلما

⁽٢) * ب، ظ: الشرطين.

⁽٦) * ت : هم اول اليمانيات ، البديل من ب، ظ.

10 [حركة المنازل]

١٠ فهـذه المنازلُ السَّواري
 ١١ فكلَّما غابَ مِنَ المَنَازِلُ
 ١٢ وكلُّ نَجْم صارَ منهُنَّ الوَتَدُ
 ١٣ وينغى مَعْرفةً الطوالـم

تَقْطَعُ كُلُّ الفَلَكِ السَّوَّالِ نَجْمٌ لَهُ ضِدٌّ يلوحُ واصِلْ فضدُّهُ فِي الْأرْضِ مَعْ أَهْلِ الرَّصَدْ والْغَارِبَاتْ والوَّتِدِ الرَّابِعِ

11 [اسماء نجوم اختان الحقة]

14 وبَعْدَ ذَا معرضةُ الْأَخْنَانِ 10 الجاه والفرقدُ والنَّعْشُ مَعَا 17 والكاسرِ المشهورِ والسُمَاكِ 17 وخَلَفَهَا الجوزاءُ ثُمَّ الشُّعْرَى 18 مُخَلَفَهَا الجوزاءُ ثُمَّ الشُّعْرَى 18 والمُحْنِثُ الداني لِنَحْوِ القُطْبِ 19 والمُحْنِثُ الداني لِنَحْوِ القُطْبِ 19 والمُحْنِثُ الداني لِنَحْوِ القُطْبِ 19 والحُرُّ يكفيه مِنَ الأَسْسارِقِ 17 والحُرُّ يكفيه مِنَ الأَسْسارِقِ 18 والحُرُّ يكفيه مِنَ الأَسْسارِقِ 18 والحُرُّ يكفيه مِنَ الأَسْسارِقِ المُطْبِرُ المُعْمِرُ المُطْبِرُ المُعْبِرِ المُعْبِرِ المُطْبِرُ المُعْبِرِ المُطْبِرُ المُعْبِرِ المِعْبِرِ المُعْبِرِ المِعْبِرِ المُعْبِرِ المُعْبِرِ المُعْبِرِ المُعْبِرِ المُعْبِرُ المُعْبِرِ المُعْبِرِ المُعْبِرِ المُعْبِرِ المُعْبِي المُعْبِرِ المُ

بدورة المركب يا إخواني ناقيه والبار، قولي فاسمَنا والنجم والشقاق، للأفلاك ويَمْدَمَا الإكليلَ والعقربُ تَرَى النيسر المعترف الصقيل، مُوّرَحُ عِنْدَ المَلَا في الكُتْبِ والغربُ ما وَصَفْتُهُ للحاذقِ أَهْوَنُهَا إِنْ كانَ ذا بَصَايرُ أَهْوَنُهَا إِنْ كانَ ذا بَصَايرُ أَهْوَنُهَا إِنْ كانَ ذا بَصَايرُ أَهْوَنُهَا إِنْ كانَ ذا بَصَايرُ

12 [أسماء تجوم أنصاف الأختان]

٢٧ والسَّبَرَانُ يها فتى والمِرْزَمُ
 ٢٧ والنَّبَرانُ شَامُ والمِرْزَمُ يَمَنْ
 ٢٤ يَحْسَبُهُمْ خابِرُ هــذا الفنَ
 ٢٥ كَيشُ ما المِرْزَمُ ثمَّ النَّاجِدُ
 ٢٧ وفي النَّظَرُ فعا يلى الأقطابُ

بِجَانَبِ الطَّائِرِ أَخَيُّ فَاعْلَمُ قَاشُوْهُمَا مِنْ قَبِلِنَا أُولُو الفِطَنْ كىلاهما إلا بفسرد خَنُ قَدْ كَنْفَا الجوزاءَ في القَوَاعِدُ يزيدُ في الأَبْصار والحسابْ

⁽١٦) * الأصول: الكاثر.

په ب، ظ: انشقاق.

⁽١٨) ، ب نظ: السفيلي .

⁽٢٢) * ت : حناحي ، البديل من ب ظ .

ردد) (۲٤) • ت: يعود، البديل من ب، ظ.

⁽٢٦) ، جميع النسخ : مما .

٢٧ وما يلى الهيرانَ فَهْوَ في النَّظَرُّ ٢٨ وسائِرُ الأُخْنَانِ في الحُقَّةُ سَوَا

13 [الأزوام الموضوعة بين الأخنان]

٢٩ أُمَّا التَّرِفًا فَهْيَ يا حبيبي ٣٠ ما بَيْنَ خَنُيْن فهـو* زامـانْ ٣١ ومن مَحَـلُ البارِ للهيــرانِ ٣٢ والمِرْزَم * المشهورِ والـدُّبْرَانِ ٣٣ وهكذا العقرب يا إخواني ٣٤ والكاسر المشهور والإكليل ٣٥ وإصْبَعُ الْأَقطابِ هِيْ ثُمَانِيَهُ ٣٦ إِنَّ مِلْتَ عَنْهُمْ مَشْرِقاً أَوْ مَغْرِبَا

14 [الأختان المتقابلة]

٣٧ والسُّلِّارُ ضِيدُّهُ الفَرَاقِـدُ ٣٨ أمًّا الحماران فضدُّ النَّاقَه ٣٩ لأَجْل قُرْب النَّعْش والسُّهَيْل ٤٠ والبارُ والشُّولَة هُمَا ضِدَّانِ 13 والقَلْبُ والإكليلُ ضدُّ الواقع ٤٢ إِنْ كَانَ صَدْرُ الفُلْكِ فِي الثُّرِيَّا ٢٤ والأَحْمَان فَهُمَا ضدَّان

أَضْيَقُ أَخْنَاناً مَعَ أَلِي الفِكُو فَهُوَ حِسَابُ الجُزْءِ مَا فَيِهِ غَوَى

مِنْ مَطْلَعِ العَيُّوقُ الى المغيب مُقَرِّرٌ مُذُ قَامَتِ القَرنَانُ لكلُّ نَجْمٍ خَمْسةٌ عِيَاني لأَنْهُمْ • أَنصَافُ شَقَّافانِ • لأَنْهُمْ • أَنصَافُ شَقَّافانِ • • فَهُوْ كَمِثْلِ البارِ في الْأَوْزَانِ ينقُصُ زاماً فاقتبسٌ مِنْ قيلي مُعَيِّنَاتٌ لِللَّانام وافِيَة يزيد زامين على ذا فاحسبًا

والنعش ضِدُّ للسُّهَيْلِ واكِدُ يَسْقُطْنَ في الحِسْبَةِ يا رفاقه منها فهذا واضح الدُّليل مُرَبِّعاتُ دورة الأَخْنَانِ والتِّيرُ والرامح لا تنازع فَعَجْدِزُهُ الجوزاءُ يا كميًا لا نَجْمَ بَيْنَهُمْ سوى الهيرانِ

^{***} ب، ظ: شقاقان .

⁽٤٤) ● الأصول: الكاثر.

م مان دا: زامان

⁽٢٩) * ت: في البديل من ب، ظ. (٣٠) * ت : هكذا . البديل من ب ، ظ .

⁽٣٢) * جميع النسخ : بالمرزم ،

^{**} ب، ظ: ليتها،

٤٤ لأنَّهُ فَـرُدُ بِغِيرٍ ضِـدُ ٤٥ وغيسرُهُ يُمْكِنُ في الكواكب ٤٦ لأنَّه أَشْهَـرُ بَيْنَ النَّاسِ ٤٧ أَزُوامُهُ تُلذُّكُرُ أَرْبِعِينا ٤٨ كـرامَـةً لِصِحْـةِ الحــاب ٤٩ لأنّها جامودُ ذي الأزْوام

بَيْنَ الجنوب والشمال يبدي يَطْلُعُ مِنْ مَطْلَعِهِ يا صاحبي فَاتَّخَذُونُ آسًا لذا الْأَسَاسَ قَـدُ عَيُّنوها قَبْلُنَا تَعْبِيْنَا والأصْلُ في [ذا] وحِسْبَةُ الأقطاب ثمُّ دليل قبلةِ الإسلام

 اصواب حسة الأقطاب]
 هذا حسابٌ يـا أُخي خفيٌ ١٥ أَسدُ ما في علم أَهْلَ البَحْر
 ٢٥ فههذه الأنجُمُ والأخنالُ ٥٣ إيَّاك أنْ تجرى عليها بالنَّظَرْ

لا يفتكر فيه سوى الذكيّ هذا الحسابُ عنذ أهل الخُبْر عندَ العَرَبْ تَقْرِيبُ يَا رُبَّانُ في موضع فيه مضيقٌ أَوْ خَطَرْ

> 16 [أصابع الدورة وعدد المنازل والأخنان] ٤٥ ومندلُ الأُخْدانِ والمدارْلِ ٥٥ سبعون مَعْ سبعين مَعْ سبعينا ٥٦ وجُمْلَةُ الْأَخْسَانَ فَاعْتِسِرُهَا ٥٧ أُزْيَدُ مِنَ المنازلِ المذكورة ٨٥ وكلُّما عاينتَ صَــْدُرِ المركبِ ٥٩ مقابلات فافهمَنْهُ منَّى ١٠ ما حاجتي أُطَوِّلُ الْأَرجوزَه

[لها] أصابع شُهِرَتْ با سائلي وأُربعُ مَعْ عَشْرِ يَحْسِبُونا ستٌ عَشَرٌ في مثلها اختبرُهَا بأربع أسقاطها مشهوره في كوكبِ أَتقنْ بِعَجْزِهْ واحسبِ واعْسرفِ الجماة بسأَيُّ خَنَّ ذي حسبة بيُّنة مبروزَه

(٥٤) زيادة من ب ظ.

⁽٤٦) * ب، ظ: فاتخذوه حسن الأساس.

⁽٥٨) ع ت : بفرز ، تصويب ب ظ . (٤٨) ، زيادة من ب ظ.

الفصل الثالث

في قواعد الباشيات ومعرفة النيروز العربي والسلطاني [والسنين]^(*) العربية والرومية والقبطية والفارسية ، واستخراجهم [بما] وافق من الحساب وطالع الفجر وغاربه على حساب النيروز

فاسمَعْ حديثاً من ثِقَهُ ذكيُّ٠ أَوْ كُلِّ فَصْلِ كَانَ * لا تُمَارِ أَوْ مستقُلا صارَ مستويا وإِنْ أَتِي المغربُ خُذْ سواهُ حتى تىرى قياسىه يىدور بالفجر فاعلَمْ أنَّه مستقلُ فَقِسْهُ سنَّة أَشْهـر يا رجلُ ٧ من أوّل الليل لآخرِ الليل • أَوْصِيْك في ذلك يا خليلي

17 [دوام القياس سنة أشهر] ١ وإنْ تُردُ معرفةَ الباشيُّ ٢ في الغَلَقِ أَوْ مَوْسِمِ الأَسْفارِ ٣ إذا رأيتَ با فتى باشياً إنّ الفجر مبتداه ه وَدَعْــهُ يمضي ستةً شهــورُ

18 [منازل القمر في القياس] شَهْراً مَعَ كلِّ الملا مُحَرِّرُ ٨ لأَنُ كِلُّ سَنَة آثْنَا غَشَرْ

⁽٤) * ت : واترى المعزر ، التصويب من ب

⁽١) * ب، ظ: ثقة ماشي.

^{((} الله عن ب ظ. (٢) ه ب، ظ: فيه .

⁽٧) ب، ظ: من آخر الليل لأول الليل.

٩ حسابُها القَمْرِي ثلاثُ مايه ١٠ يقطعُها العشرون والثمان ١١ فَيْصُفُّهَا أُوانُّهُ النهارُ ١٢ ونصفُها يُهدَى به الرُّبَّانُ ١٢ منسزلتسان دائسمَ الأوقساتِ ١٤ والصافياتُ يا فتي أثنا عَشَرا ١٥ فسوف أَذْكرُها على الكمال ١٦ وأَذْكِرُ الكواكبُ اللواتي

أُرْبَعُ وَخَمْسون لها وفايته لكلِّ نجم نُوءُ في الزمانِ في الليل لا تدركه الأبصار في ليلهِ لكن بها نقصانً عن صُورم البيضاء حين ياتي عندي في كلِّ أُوانِ فاذْكرُ ا من أُوَّلِ النيروزُ الي الزُّوالِ هُمْ رُحُويًاتُ على الثبات

19 [النيروز العربي]

١٧ أُوَّلَ ما يسيحُ نيروزُ العَرَبُ ١٨ وطالِمُ الفجر هُـوَ الإكليـلُ ١٩ أُمًّا السعود تَحْتَ القدمْ لا تدركه ٢٠ واحسب لكلِّ منزلة نوءها ا ٢١ من الليالي أربعاً وتسعا ٢٢ فجملة المنازل العشرينا ٣٣ يوماً ويلخفها ثلاث مايه ٢٤ فإنَّ هذا العام يانَـوَّاني *

فاعلم بأنَّ النجمَ بالفجر غَرَبُ والمستقل الأسد النبيل بعد انقضا خمس ليالي اتركه تُقيم في موسمها مجراها ما في حديثي من خلافٍ قَطْعًا مع الثماني لهم ستوناه وأربعة فوقهما عبلاتيه ما فيه من شك ولا مراء

⁽۱۰) چ ب: يوفي، ظ: يوم.

⁽١٢) ، جميع الأصول: ليلة.

⁽۱۳) * ت: مورم التصویب من ب ظ.

⁽١٤) * ت : ندكر ، التصويب من ب ظ .

⁽١٥) * ب: ادركها .

⁽١٦) * ت : رجوعات ، البديل من ب ظ .

⁽۲۰) * جميع الأصول: سواها.

⁽٢١) * ب: من الليل ، ظ: من مرّة الليل .

التصويب من ب ظ.

⁽۲۲) * ت : لهم يستوين ، التصويب من ب

⁽٢٣) * ظ: كما قال ماية .

⁽٢٤) * ت : للسواء ، ظ : بلي نواء ، ب :

^{**} ت: شط. التصويب من ب ظ.

20 [السنة القمرية والسنة الشمسية]

٢٥ وذاك عامٌ عربي التقويم ٢٦ فالسُّنةُ الناقصةُ القَمْريَّه ٧٧ والقبطُ والفرسُ معا والرومُ ٢٨ والفرقُ فيما بينهمٌ يسيسرُ

وَضَعْنَهُ الحسَّابُ مِنْ قديم والزائده تعرف بالشمسية عامهم يزيد عَنْهُم يوم لا يمتري فيه فتي خبيـرُ

21 [بدء السنين النيروزية]

٢٩ ومن شهورِ الفرس أُوَّلُ يوم ٣٠ والخامسُ العشرونَ مِنْ هَتُورا ٣١ للعربي ا صاح هو والهندي ۳۲ لم يَبْقَ نيروز سوى السلطاني ٣٢ أُمَّا ذوو الأزياج والجساب ٣٤ بعدَ أَحَدُ يا صاحِ والعشرينا ٣٥ ويطلع الإكليلُ تاسعٌ عَشَـرٌ ٣٦ وعندنا نيـروزُنَا اللُّ عَشَرْ ٣٧ فـهـذه قـواعـد كـلُّيـه في الأسُّ إذ تحسبُ لها الروميه * * *

٣٨ بالله يا زيَّاجُ إِنْ زاغَ الْفَلَكْ

٣٩ ولا تغيّر باقي العلوم

٤٠ إنّ هذه حاوية المجرّب

فَرْوَرْدِيَنْ مع أَوْل ِ التقويم هُـوَ أُوَّلُ النيروزِ كُنْ خبيـرا وَغَيْرُهُمْ فَافْهِم [عُطِيْتَ] ** رشدِي يدخلُ دخولَ الشمس في السرطانِ " عندهم النيروز بالصواب ثاني شهور الروم في تشرينا من ذلك الشهر * يُرَى بالجَهَر ** إكليلنا بالفجر بهذا الشَهَرُ٠٠

في غير عصري فأصلحوا مافيه شكْ في جملةِ الحساب والرسوم لا شكُّ فيها عند كلُّ العَرَب

⁽٢٥) ♦ ت: وضعته للحساب، ب: وضع

للحساب، ظ: وضم الى الحساب. (٢٩) ، ب نظ: بروزماه . ت : قردودما .

⁽۳۱) ، ت : فالعربي ، التصويب من ب ظ

[﴿] زيادة من ب ظ.

⁽٣٢) ع ب، ظ: وللسرطان.

⁽٣٣) ، ب، ظ: والأرياح.

⁽٣٥) • جميم الأصول: وينزل،

په ب، ظ: القمر،

^{***} ت: الفجر، البديل من ب ظ.

⁽۳۱) ♦ ب، ظ: پنزل،

نظ: اكليلنا الفجر بهذا الفجر.

القصسل الرابيع

في معرفة الباشِيَّات ومواسمها [وشهورها وثبوت] " قياسها وزواله على حساب النيروز وذكر ما يتعلق بصعود الجاه ونزوله وصعود الفراقد ونزولها ، [وما يتعلق بذلك] "

22 [القياس الأصلي]

عشرونَ يوماً بَلُ أَقُلُ وَاتَفَضَا الصادقُ المشهورُ في ذَا الشغلِ أُعني بعدِ الأُولَ بالتَّمْيينِ* سَيَّـدَةُ المَنْازلِ المُعْتَـرَفَـه حينتلٍ يغيبُ عَنْكَ النَّاجِـدُ في ذلكَ الموسِمِ يا أُخيً

وإنْ تَرَ النَّيْروزَ مِنْه قَدْ مَضَى
 ٢ يصع في البحر القياسُ الأصلي
 ٣ ويَنْقضي النَّصْفُ مِنَ الكانون
 ٤ يَــوْمَشْذُ وتستقلُ الصَّــرْفَــه
 ٥ وتَعْتَدِلُ في المَشْرِقِ الفراقِدُ
 ١ ولَمْ يَكُنْ للجاءِ مِنْ باشيً

23 [قياس الواقع والتير]

٧ وقس على الواقع ثم التّبو في ذلك الموسم بالتحريب
 ٨ لأول الماشة والتسعينا عَيْتُهُ لَكْ قَبلَ ذا تعيينا

⁽A) # d : من .

^(،) زیادة من ب ظ.

⁽٣) ، ب نظ: بلغيني .

24 [قياس المربع]

٩ قِسِ المُرَبِّعُ ما خلا ذا النُّوَّا ١٠ وأَنْجُمُ العبوَّا بغيبِ باشِي ١١ دليلة يَظْهَرُ للرَّبَّانِ ١٢ وللمسربِّعُ أيُّها المهلُّبُ ١٢ لكنِّني أَذْكُرُ مِا ٱسْتُعْمِلاً ١٤ فَأُولُ القياسِ في التَّحْسَانِيُ ١٥ أَرْبَعُ أَصَابِعٍ بأَرضِ الحدُّ ١٦ ويعدَ ذا إذا أَسْتَقَلُّ الْأَعْزَلُ ١٧ فهُمْ بأَرْضِ الحدِّ خَمْسَةُ زاهي ١٨ لا زالَ يَنْقاسُ آعْمَلُوا عليهِ ١٩ بيانً هــذا كلَّهُ آختـراعي

25 [صعود الجاء ونزوله]

٢١ أمَّا صعودُ الجاهِ والنُّوولُ ٢٢ وهكذا يميسلُ للهيسرانِ ٢٣ ولا أَشَارَ الأَوَّلُونُ لِسِتَ ٢٤ وغاية الميل الى المَشَادِقْ ٢٥ وغابةً العلوِّ والصُعُبود

إذا تَسوَسُطْنَ نُجُومُ العَوَّا أَيضاً ولا لِلأَعْزِلِ الطَيَّاشِ • منْ باشي التَّشرةِ للزُّبَانِ جُمْلَةٌ قياساتِ لها مجرُّبْ ثمَّ يفيدُ الطالبينَ الفُضَالَا وبينه واليم والضوقاني زاويَدة العَوّا عليه تَهْدِي والأوسطان أعْتَدَلا با أمار والكلُّ يَنْقُصُ لِن يَادِ الجاهِ وفي الحجاز ما له شبيه حَلَيْةُ مِنْ مَلِكٍ مُسطَاع إلا الفطينُ الحاذقُ الأستاذُ

أَرْبَعْ أَصابِمْ صحَّ ما أَقُولُ • بلا زياداتِ ولا نُقْصَانِ في الفَرْغ ليسَ ذاك من نعتى ا إذا آستَقَالُ الشُّولُ يِامُوافِقُ إذا أَسْتَفَلُّ الفَرْغُ بِالتوكيدِ

⁽١٠) • هذا البيت ساقط من ب ظ.

⁽۱۱) ، ب نظ: من كل باشي .

⁽۱۲) ت ت : مما ، البديل من ب ظ .

⁽١٨١) • شبيه: قبلها من محذوفة .

⁽١٩) ۽ ٻ، ظ: مداية . (٢١) ، ب، ظ: ماصح اقول.

⁽۲۲) ، هذا البيت ساقط من ب ظ

٢٦ لأنَّ دائماً له آنقضًا ٩ ٢٧ وغاية الميل الى المغيب ٢٨ وغاية الهُبُوطِ في ذا الحين ٢٩ يصيرُ في الجاهِ مِنَ الْأَصَابِمُ ٣٠ وآعْلَمْ خليلي أنَّ لِلْفراقِيدِ ٣١ أُخْبِرُ بهذا في جميع الدنيا ٣٢ وَيَغْرُبانِ الفرقدان النَزْع *

26 [البعد بين القطب وبعض النجوم] ٣٣ وبينَ نَجْمِ الجاءِ والقطب قَلَرْ ٣٤ يحسبُهُ الفِرِّيرُ نَجْمَ القُطْب ٢٥ دليلُهُ أَظْهَرُ منْ شَمْسِ الغَدِ ٣٦ وبينَ ذي القطب وبينَ الفَرْقَدِ ٣٧ وبينَ ميخ الجاهِ والقُطْبِ عَدَدُ

بعد آنْتِصَابِ البَطْنِ نَقْصُ الفَرْقَدِ ثَمَانُ أَصابِعُ قَدْ وَرَدْ ياسيدي٠ ئَمانٌ أَصَابِعُ في القياس قَدْ وَرَدْ

27 [ترتيب الميخ والجاه وقطب الجاه والفرقدين]

٣٨ والميخُ والجاهُ وقُطْبُ الجاهِ والفرقدانِ فَرْدُ حَرْفٍ واهي ٣٩ مِنْ أُحْرُفِ الهِجَاءِ وهْيَ الَّلامْ ٤٠ ورأْسُها المبنَّ وأمَّا ذيلُهَا

معطفها القُطْبُ فَكُنْ عَلَامْ " الفرقدان مكذا دليلها

(٣٥) * ب : وليلة اشهر ، ظ : دليله اشهر .

(۲۹) ♦ ب، ظ: سبم اصابع ونصف

ومثلُّهُمْ ميخ الجُدَيُّ أَيـضَـا

إذا أَسْتَقُلُ الهَفْعُ يا حبيبي

أُعْنِي آنْتِصَابَ الصَّرْفَةِ يا حُسَيْنُ •

إِثْنَانِ نَاقِصْ لا تَكُنْ مُنَازِعْ

وفيه يَطْلُعْنَ هما ويأْتِيَا

مُعْتَدِلَيْن في آنْتِصَابِ الفَرْغَ

أصابعُ آثنتَانِ خُدْ منَّى الخَبَرْ

لأنَّه أَشْهَرُ ما في القرب

والخطأ المزدوج واضع .

يا مبتدى .

⁽٢٦) • ب، ظ: لأنه دوقاله تقضا.

⁽٢٧) ، الأصول: الهنم .

⁽YA) * ب: ياحين.

⁽٢٩) ه ب، ظ: الزام،

هه بي ظ: احفظ.

⁽٣٠) ♦ ب، ظ: لها اعتدالين.

⁽٣١) ♦ ب: احداهما، ظ: احداهما ذا.

⁽٣٢) ♦ ت : قرع ، البديل من ب، ظ.

⁽٣٨) ♦ ب، ظ: فَمُو وحرف،

⁽P9) * الأصول: مطلعها،

^{••} ب، ظ: غلام.

⁽٤٠) * ب ، ظ : الميخ اذا ما ذيلها للفرقدين .

٤١ إِنْ شَتْتَ أَنْ تَخُطُّ بِالْيِمِينِ ٤٢ لكنُّها معَ آنْتِصَابِ الفَرْغِ

28 [ترتيب الميخ والجاه والقطب]

٤٣ والميخُ والجاهُ وذا القطبُ أَلِفَ ٤٤ سَمُّوهُ مِيْخَ الجاءِ أُولُو اللبِّ ه٤ وحينَ يأتي لغروب الفرقدِ ٤٦ وفي الطلوع يطْلُعَـانِ جَمْعَا ٤٧ ثم الزبانان لَهُمْ يماشِي ٤٨ أُمَّا سُهَيْلٌ فَهُوْ رقيبُ الذابح ٤٩ إِنْ يَرَ ذا الجاهَ * ولَمْ يَصْدُقْ مَعَه ٥٠ فيا لَهَا منْ حَرَكاتِ عارضَه ١٥ لَأَنَّنى لَمْ أَرَ في زماني

29 [باشِيُّ الزُّبَاني]

٢٥ وإنْ مَضَتْ سبعونَ حَلَّ الفَجَرْ* ٥٥ وأعْتَدَلَ المَعْقِلُ والنظَّليمُ وه على سَنَام الجَدْي والباشِيُّ ه، أمَّا الحمارانِ فَهُمْ بالحدُّ ٥٦ فَمِنْ شُبَاطٍ خامشُ مُدِيْمُ
 ٥٥ أمَّا الزُّبَانُ فَهْوَ مُسْتَقِلُ ٨٥ من ذلك الحين تُرى الفراقدُ

أَوْ باليسارِ إِنَّ ذَا تمكين تصيرُ خطًّا بيُّناً في الشُّرْع

مُعْتَدِلُ مِقْومٌ لَمْ يَنْحَرِفُ لأنَّه مسامرٌ للقُطْب يغيبُ ذا مع الحمارين أهْتَكِ ويركبا الأقطاب في وقتٍ معا دليلة نصف أصبع في الباشِي إِنْ غَابَ ذَا يَطُلُعُ ذَا يا ناصحِي أَعْلَى وأَسْفَلْ منْ فَرَاقِدْ أَرْبَعَه بَسَطْتُ بَعْضَهَا وبَعْضٌ غَامِضَه مُسَاعِداً في ذا على المَعَاني

سَعْدُ بُلَمْ خُذْ مِنْ صحيح الخَبَرُ والفرقد الكبير يَسْتَقِيمُ نصفُ أَصْبَعِ فَالْهَمَةُ يَا ذَكِيُّ خَشُ أَصِابِعُ قَطُ لا تَعِدِّي يمضى بذاك النو يانديمُ والطُّرْفُ في الغرب لهُ مَحَلُّ تشفُّ والجَدْيُ عَن الما صاعِدُ

⁽٩٧) ♦ ٿ: تقر.

⁽٤٤) ، جميع النسخ : سامر . (٤٥) • ب، ظ: لك الحمارين. (٥٦) * ت: قليم، البديل من ب، ظ.

⁽٤٩) ، ب ظ: الجاهل.

^{- 17-}

٥٥ دواصة للمسائتين يَحْسِبُوا
 ٢٠ وآعُلَمْ بأنَّ الجاه مِنْ ذا المُسْتَقَلَ
 ٢١ ومنزلات الشام في آشيقلالها
 ٢١ وباشي الشَّوْلَةُ إليكَ الوَصْفُ

30 [باشئ منزلة النَّعَاثم]

فوقَهُمَا شهرُ زمانٍ جَرِّبُوا يَسْقَبُلُ البائِيِّ للفَّرْغِ وسَلْ* لا يَحْدُرُ الجاهُ* ولا يُرْقَى لَهَا في غير ذا النوِّ أَصْبَعُ ونصْفُ

ثم ثلاثة قُررَتْ زِدْهَا مَعَه ويستقلُ الجَدْيُ حتماً لازمَا الجَدْيُ الجَدْيُ الجَدْيُ الجَدِي الحَسِلُ آخباري من المغاربُ تَحْتَهُ الكبيسُ من المغاربُ تَحْتَهُ الكبيسُ المَيْنَ قَرْسُمُنَا أَوْصُفًا المُثَولِ لِمَايتَيْنَ وَيَسْعِينَ ذَا الوَصْفَا المُثُولِ ينيف ربعاً رَهُمَا بِالعَيْنِ صَلَّما البالعَيْنِ المُدَاعِلُ المُثُولِ لِنَا المُعْنِ مَعَلَّما الباجسُ يا حميلُ اليه ضلًا والسرّقيبُ ماشِي الله ضلًا والسرّقيبُ ماشِي لأنه عِلْمُ حقيقُ أصلي، لا لأنه عِلْمُ حقيقُ أصلي، لا لأنه عِلْمُ حقيقُ أصلي، لا لأنه عِلْمُ حقيقً أصلي، لا لأنه عِلْمُ عقيقًا أسلي المُعْلَادِينَ عَلَادًا لللهِ عَلَادًا لللهِ عَلَيْهِ عَلَيْهِ اللهِ عَلَيْهِ عَلَيْهِ اللهِ عَلَيْهِ عَلَيْهِ عَلَيْهِ عَلَيْهِ عَلَيْهِ عَلَيْهِ عَلَيْهُ عَلَيْهِ عَلَيْهُ عَلَيْهِ عَل

الله عليه والمورد المورد والمنافع المورد والمنافع المورد والمورد والمورد والمورد والمورد والمورد والمورد والمورد والمرد و

٧٢ لَأَنُّ يا رُبَّانُ كِلَّ باشِي

٧٣ ذكرته في عرض هذا الفَصْل
 ٧٤ وقالَ بعضٌ إنَّ نَسْرَ الطائرُ

الجدى .

⁽٦٠) + ب، ظ: وژل.

⁽٦١) **4** ب ، ظ : لا ينحدر الجاه ت : منحدر

⁽٦٢) ، ب نظ: القلب.

 ⁽٦٦) ♦ ت : الذي حيا ، البديل من ب ، ظ .
 (٨٦) ♦ ت : ثم يكون . البديل من ب ، ظ .

عه ب، ظ: للمايتين والتسعين هذا

الوصف ، ت : من مايئين وتسعين هذا الوصف .

⁽٧٠) • ب، ظ: بنيف تراهما، ت: ينيف ربعاً تراهما بالعين.

⁽۷۲) ● ب: املي، ظ: جزلي، وفوقها املي.

31 [باشِي سَعْدِ بُلَع]

٥٧ أَوْ كَانَ خَمْسَةُ أَشْهُرِ وَيَضْفَا
٢١ والسَّبْسِرَان سُمَّ والسَّبْسِوَقُ
٧٧ وفي حسابْ إن رمتَ من أيار
٨٧ وذلك الحينَ يكونُ الفرقدُ
٨٠ والكنّما الجاهُ بشطَّ الشرقِ
٨٠ والمستقلُ يا أخيْ سَعْدُ بَلَغ
٨٠ والمعضَ قالَ هُو سَعْدُ الذَّابِحِ
٨٨ والبعضُ قالَ هُو سَعْدُ الذَّابِحِ
٨٨ والبعضُ قالَ هُو سَعْدُ الذَّابِحِ
٨٨ إلا نجوماً قد بَلَتْ من الحَمَلُ
٨٨ يضاؤ باشي الجاهِ يا سعيدُ
٨٨ يعومُ لَكُ قياسَهُ يا صاحِ
٨٨ يعومُ لَكُ قياسَهُ يا صاحِ
٨٨ أيضاً وعشرونَ مِنَ الليالي

32 [باشِي الفَرْغِ المُقَدَّم]

٨٩ وإنَّ يَكُنُّ مايَّتَانِ يا هُمَامًا ٩٠ والفجرُ بالهَقْعَةِ بالصوابِ ٩١ والفرقدانِ في قياسِ فردِ

فالفَجْرُ بالبطينِ هاكَ الوضفا يُطَالَعَانِ الشَّمْسَ بالتَّحْفِيْنَ سبعَ حِسَابُ الحافقِ المهارِ مواسيُ الجاه عليه آغْتَهِدُوا لأنَّ هذا ** مُبْتَدا خُدْ صلقِي وفيه قولان وكل يُسْتَمَعْ أمني لك النَّرةَ بالبِيانِ تظهرُ في السَّما بلا مغيب تظهرُ في السَّما بلا مغيب كالشُّرطينِ مَنْ تُردُ عَنْ ذا فَسَل ثلاتَ لا تَنْقُصْ ولا تدريك وفوقَهُمْ ثلاثُ للكمالِ

أيضاً ويوم فافهم الكلاما والمُسْتَقِلُ الْفَرْعُ بالجسابِ ثمانيَة صادوا برأس الحدّ

⁽٥٧) ♦ ب، ظ: مناك.

⁽٧٨) الأصول: مساوي .

⁽٧٩) ♦ ت: لكنها ألبديل من ب، ظ،

[٭] ت: شاطي ، البديل من ب ، ظ ،

^{•••} ب، ظ: من ذا.

⁽A1) * ت: هذه، البديل من ب، ظ.

⁽٨٣) * ت : الحصراء التصويب من ب ، ظ .

⁽٨٤) • ب، ظ: بالدوام .

⁽٨٦) * ت : يا اخي ، ب ، ظ : بباشي .

قياسة إصبغ بالامراء كالأهما يستقبل الناول أُرْبَعَةٌ والج صارَ الْأَقْصَى ذا هادمُ البَاسِي وهذا شاذًا ا نصفَ حُزَيْرَانِ رُويٌ في الذُّكْر في ذلكَ الموسِمْ تَرَاهُ واكِدُ عند آغتِدَال السُّهْمِ لا تعدّي لم يَحْمِلِ الفَصْلَ فَيَأْتِي الفَصْلُ يُمْكِنُ أَنْ يقيسَهُمْ ذو الخُبر فَأَفْهَمْ لِنَظْمى وَآفْقهِ المعانى برأس حَدُّ هَاكَ نُصْحى آسْمَعُه مستقبل طلوعَـهُ لَمْ يَـلْبَثْ ترى هناك السُّلِّبارَ يَرْفَعُ أَرْبُعْ أَصابِعْ قطُّ مَا فِيه مِرَا أَرْبَعَـةً زَلُ ۚ بِهِ مَنْ يُحْنِثُ في الْأَفْقِ لَمْ يَحْتَجِ للدنوُّ يستقبلُ المسيرُ لللأفُول فالسلَّبارُ القطبُ رأي العينِ ثُمُ المُسرَبَّعُ أَيُّها العليمُ

٩٢ والسُّلِّبارُ فوقَ وَجْهِ الماءِ ٩٣ والميخُ فوقَ الجاهِ لا يزولُ ٩٤ فباشِي الجاهِ أَصَابِعْ تُحْصَى ٩٥ وباشي الصَّرْفَةِ ضَدُّ هذا ٩٦ قياسُ ذا تَلْقَاهُ بِالفجير ٩٧ أيضاً وسَهْمُ القوس والفراقِدُ ٩٨ حَدُّ عَشْرَةَ الفَرْقَدُ براس الحدِّ ٩٩ ويَيْنَهُنَّ اختيلافٌ سهالُ ١٠٠ والسُّلُسِارُ ثُمَّ نَجْمُ النُّسْر ١٠١ خصوص في سافل يا إخواني ١٠٢ قياسُهُمْ يا صاح عندي أُرْبَعَه ١٠٣ والنُّسْرُ في الغروب ثمَّ المُحْنِثُ ١٠٤ وكلُّما غاصَ مِنَ الجاهِ آصْبَمُ ١٠٥ والواقعُ الدرِّيُّ لن يُغَيِّرًا ١٠٦ أمَّا براس الحدُّ قِيْسَ المُحْنِثُ ١٠٧لأنَّه في غايةِ العلوِّ ١٠٨حتى يغيب النسر يا خليل ١٠٩ وإنّ ترى الواقع اصبعين ١١٠ كــذالك المَعْقــلُ والظَّليمُ

لما جاء في البيت ٩٩ من الفصل الحادي عشر من الحاوية .

⁽١٠٨) * الأصول: السير.

⁽١١٠) ♦ ت : فذاك ، التصويب من ب ظ .

⁽٩٥) ، لغة محلية في شاد.

⁽۱۰۲) ، س، ظ: هناك.

⁽١٠٦) • ت: ذلك، ب، ظ: زلل. (١٠٧) * هذا البيت مقحم في النص وبحذفه

يصبح عند أبيات هذا القصل صحيحاً وموافقاً

اا إذا آستوى قياسُهُمْ وآغَتَدُلُوا الإنسَّلِسَارُ قِسْهُ نَمَّ النَّسْرَا الأَنهُمْ أَقْسَرَبُ مَنْ سُهَيْسِلِ الوالسَّلْبَارُ أَبْعَدُ مِنَ المُسَرَّعِمِ الوالسَّلْبِارُ أَبْعَدُ مِنَ المُسَرَّعِمِ المادوامُهُمْ كَلُهُمُ ياصاحِ الاوكد مستقلْ الاعراد مستقلْ المتعود مستقلْ المادوالموتُ والناقة يا أَخِيْ آسْمَعِ المَورِدُ بَاشِيْهُ في النَّمَانِيَّاتِ

33 [باشِيُّ الشرطين]

١٣١ وَإِنْ مَضَتْ مَايَتَانِ مَعْ خمسينَا ١٣٧ فَالَطُرْفُ فِي الضَّجْرِ بلا مُحَالِ ١٣٧ في ١٣٠ في الفرقدِ ١٣٥ وأوَّلُ النَّفْشِ وَقَمَّ الفرقدِ ١٢٥ ويَطْلُمُ الفيقيلُ بسالاً طُواحِ ١٢٥ وذَلك النَّوْ يكونُ في آبِ ١٢٧ وذلك النَّوْ يكونُ في آبِ ١٧٧ وذا الذي شَرَحْتُ يا عزيزي

فهمْ على القطبِ الجنوبيُ نَزُلُوا عندَ طلوعِ النَّيرِ تَلْقَ البَرُا اللهُ للقُطُبِ الجنوبِ ياخليلي لِلْقُطْبِ أَعني لِلْجنوبيْ فَاسْمَع لأُوَّلِ النيروزِ والأسياح و كُفِيْتُ شَرَّ الجَهْلِ والتصريما من قبلِ ذا الباشيْ بنو قد كملْ حسابِ جُزْر حَسنِ الوصفِ ا باشيَّهُمْ أَرْبُعْ مِنَ الأصابِع إعْمَلُ عله وآستيع صفاتي

وفوقها شلاشة تمكينا أمَّا البُطينُ صارَ في آستغلال باشيه ثلَفة ونصف آقتيه هُمْ خَمْسة بالحد فافهَمْ وآهتي من شاطىء الجنوب كالمصباح سَبْع لُيتلاتِ على الحسابِ يبقى لِنَهْدِين مِنَ النَّهِونِ

⁽١١٢) * ب، ظ: البشرا.

⁽١١٥) ، ب ، ظ: السياح.

⁽١١٧) * ب، ظ: يتو اقل.

⁽١١٨) * ب ، ظ : في حساب الجزر مستحسن الوصف ، ت : في حساب الحورا اكثره في

نظمه والنثرا .

⁽١٢٠) ***** ت : اخمي تاتمي ، التصويب من ب ،

^{. 11}

⁽۱۲۲) • ب، ظ: فالفجر في الطرف. (۱۲۳) • ب، ظ: ونصف بالدلايل اقتد.

⁽١٧٤) ، ب غ النسر.

⁽١٢٧) * ب، ظ: ليفي.

١٢٨ وَأَعْلَمُ بِأَنَّ يِا أَخِي ذَا المُستقلُّ ١٢٩ حَذْرك في النتخةِ في الفراقِدُ ١٣٠ إنَّ الفراقـدُ كلُّهـا تقريبُ

رقسة النُّانَانُ مافه خَلَاً فيما خلاهن القياس وارد إلا مَعَ البطين فَهْيَ تُصِيبُ

34 [باشِيُّ الدُّبَرَان]

١٣١ وفي الثلاث مائة ياخِيُ إلَّا ١٣٢ بِالفَجْرِ والفَجْرُ اليه الزُّبْرَةُ ١٣٢ يومين في أيلول إحبب هذا" ١٣٤ بينَ هراميزَ وبَيَّنَ البساطِنَه ١٣٥ ثُمَّ ترى المُحْنِثَ في الْأَفُولِ ١٣٦ من قبل ذا النَّوْ لاتَّكُنْ ناسِي٠ ١٣٧ كلُّ يصيرُ يا فتى أَصْبَعَيْن ١٢٨ في جاه أُخَذ عَشْرَة بلا محال ١٣٩ إصْبَعْ بإصْبَعْ في العَرَبْ والهندِ ١٤٠ وَيَعْتَدِلُ يا صاحبي الزُّبَّاني* ١٤١ في ذلكَ الموسم غيرَ خافي ١٤٢ الى ثمانين وياتى المَغْرِبُ

عشرينَ فالدُّبْرَانُ قَدْ تعلُّا باشيُّه ثَلْثُ مَعَ ذي الفكرَهُ* ففيه أرباح الصّبا تحاذا" ومِنْ عَدَنْ لفرتكِ كُنْ فاطِنَه فَقِسْ عليهِ هُوَ وَالسَّهِيل إذا أَسْتَقلُ النجمُ فوقَ الراس أيضاً ونصفاً تَـرَهُ بالعين إِنْ زِدْتَ غاصَ الجاهُ بالدُّلالِ نعمَ قياسٌ قِيْسَ هذا عندي مَعَ السُّهَيْلِ فافهَم المَعَاني •• وهُمْ براس الحدُّ سِتُّهُ وافي دونَ قياساتهمُ مُجَرُّبُ

⁽١٢٨) * ب، ظ: المستقبل.

⁽١٣٠) * ب، ظ: الا مع البطين والمرزم

⁽١٣٢) * ت : باشيه يلقى مع ذي الكفره .

البديل من ب، ظ.

⁽۱۳۳) * ب، ظ: ايضاً احسب،

ط: مذاك فيه ارياح الصبا

⁽١٣٦) ، ب ، ظ: لا يكون باشي .

⁽۱۳۹) * ب، ظ: برّ.

⁽١٤٠) * ب، ظ: الدنول. والزباتي امالة

^{**} ب، ظ: ما اقول.

⁽١٤٢) * ب، ظ: الماثنين.

35 [بائين المِرْزَم]

187 وفي الشلائمائية ثمَّ خَمْسُ 188 في الغَمْر وهُوَ أُولُ الميزانِ 160 والمستقِلُ الهَنْعُ ثُمَّ المردَّمْ 187 والفرقدُ الكبيرُ كُنْ عليما 187 وقشهما بالحدِّ سَبْعة مُحْكَمَه 187 وَقِسْ عليبِ أَشْهُراً تُسلانَه 187 وَقِسْ عليبِ أَشْهُراً تُسلانَه 187 أَقِسْ عن النيروزِ ثمَّ ينقضي 187 عني مِنَ النيروزِ ثمَّ ينقضي 100 وبينَ ذا الباشي والدَّبرانِ 107 على سَنَامِ القَطْبِ بالشمالِ 107 على سَنَامِ القَطْبِ بالشمالِ 107 على سَنَامِ القَطْبِ بالشمالِ 107 على السَّمالِ 108 مَعْ ذُبُّانِهِ 108 باشي ونصفي 108 بالشمالِ 108 بالشم

36 [باشِيُّ الذَّراع]

مَهُ وَيَطَلَّمُ الْأَعْزِلُ وَقْتَ الْفَجْرِ الْمَجْرِ الدَّرِاءِ مُسْتَقِلُ الدَّراءِ مُسْتَقِلُ الدَّراءِ مُسْتَقِلُ الالدَّراءِ مُسْتَقِلُ الالدَّراءِ مُسْتَقِلُ الالدَّراءِ مَشْرَ يَوْمِ المه اللي آزْبَعَهُ أَشْهِرِ يَا خَلِيلِي المهارُ اللَّيْلُ والنَّهَارُ اللَّيْلُ والنَّهَارُ اللَّيْلُ والنَّهَارُ اللَّيْلُ والنَّهَارُ اللَّيْلُ والنَّهَارُ اللَّيْلُ والنَّهَارُ اللَّيْلِي اللهِ اللهِ اللهُ الله

على ثَلَثْ مايَة وثُلثي شهْر باشي آصيم ونصف في ذاك المحَلْ مِنْ أَوَّل التَّشْرين في التقويم تمضي من النيروز باللَّليل حينشذ ويُدْكَالُ الكُلِّلِ

فالفجرُ بالعوَّاءِ أَمَّا السَّمسُ

في مُنَّةِ الدهورِ والأَزْمانِ

باشِيْ آصْبَعَيْنْ ورُبْع فيهِ ۚ فَأَغْنَمْ يبقى على الآخـر * مُسْتَقِيمَـا

وهُوَ قِياسٌ جَيِّدٌ فالْمَزْمَه

أيضاً ونصف ماية علامه

ويستوي سواه فاحْسِبْ وأحْفَض ِ
ثمانِ مَمْ عشرينَ فأسْمَعْ قولي

يَعْتَدِلُ البارُ مَعَ الذَّبَّانِ

والبار للجاو ميبقى عالي

ياخيرَ باشيَّ قِسْهُ في أُوانِهِ فالميخُ والجاهُ سِوا خُذْ وصفي

⁽١٤٣) * جميع الأصول: قالبدر واللحن واضح . (١٤٨) * ت : علالة ، التصويب من ب ، ظ .

⁽١٤٥) ، ب، ظ: فقس . (١٤٩) ، لغة في واحفظ .

⁽١٤٦) • ب، ظ: صاحبه . (١٥٥) • الأصول: وثلث .

١٦٠ وفيهِ غُلاتُ الشعيرِ ترمى ١٦١ في شَهْرِ تِشْرِينَ الهلالُ العَرَبِي

37 [باشي منزلة الطّرف]

١٦٢ وفي الثُلَثُ مايةِ والخَمْسين ١٦٢ ويستقلُ الطرفُ فوقَ الراس ١٦٤ لكنَّما الفرقَدُ صوبَ الشرقِ ١٦٥ يكونُ باشي الجاه إصبع واحِدْ ١٦٦ ولا يَكُنْ ذَا النُّو حتَّى ياتي ١٦٧ قَدْ كَمُلَتْ في عَشْر بَاشِيَاتِ* ١٦٨ قصدي أختصار نظم ذي الأبيات ١٦٩ تَمُّتُ بِفَضْلُ * المَلِكِ العُلام ١٧٠ وحِسْبَةُ النيروز والنَّواءِ ١٧١ بَــلُ بينــا وبينَهُمْ خــلافُ

يأتى الزُّبَاني الفجرَ بالتعيين والجاهُ والفرقدُ في التواميُ. شرحتُ هذا كلَّهُ بالصدق لِخَمْسَةِ أَشْهُرْ حِدِيثٌ واكذ تشرينُكَ الثاني وذا في تُبتِ٠ في عَرْضِها لِلْمُفْتكِرُ مَآتِ ** كي تنتهي عندَ المبالغات باشى نُجَيْماتِ اليَمَنْ والشام

وأشهر الروم بلا غواء

في علَّة السندن ما عَاافُ

وَهُو أَعْتِدَالُ للخريف يسمى

فيهِ قرانياتُ لِبُرْجِ العَقْرَبِ

⁽١٦٠) ، ب نظ: علامات.

⁽١٦٣) * الأصول: النثرة، ** الأصول: في

⁽١٦٥) * ت: ذا حديث ، البديل من ب ،

⁽١٦٦) * الأصول: سبت.

⁽١٦٧) * الاصول: عشر باشيات عد الاصول: ما يأتي

⁽١٦٩) * ت : بحمدالله . البديل من ب ، ظ . (١٧٠) * ت : يحسبه ، البديل من ب ، ظ .

⁽١٧١) ، جميع النسخ: أيها العراف.

الفصيل الخاميس

في معرفة دِيَر برُّ العرب والحجاز والسُّيام والخليج البربريِّ والسومال والرُّيم والزُّنْج وجزائر القُمْر وآخر بر* السودان والكانم فيها صحّ به الحساب والتواريخ**

38 [الديرة من جرون الى باب المندب]

مُخْتَصَراً بِنَظْم ذي البَصِيرَه أعنى جَـرُونَ بَلْدَةَ الأمانِ ومنَّهُ مِلْ على اليسار وأجْتَهِدُ الى سُحَارَ البَلَدِ المُؤيِّدِ إِجْرِ على الجَوْزَا ولا تَمْكُثا مَجْرَاكَ في السُّهَيْلِ كُنْ ثَبَّاتًا •

١ وبعدَ هذا هاكَ شُرْحَ الدُّيْرَه ٢ فأولًا منْ بندر السَّلطانِ ٣ إِجْر على القُطْب لفك الأسَدْ ٤ وأَعْمَدُ الى مَطْلَعْ سُهَيْلِ تُرْشَدِ ه ومنْ سُحَادٍ إِنْ تُرِدْ مُسْكَتَا ٦ ومِنْ هناكُ إِنْ تُرِدُ قَلْهَاتَا ٧ ومنْ هُنَاكَ إِنْ شَيْتَ رَأْسَ الْحَدِّ

مجراكَ في الجَوْزَا فَلا تُعَدُّ

 ⁽٥) * جميم النسخ : مكلًا، وهو تصحيف،

^{*} جميع النسخ: تملّا وهو تصحيف.

⁽٦) • ت: بالثبات. البليل من ب، ظ.

ت: جزائر، البديل من ب، ظ.

به الأخيار والنقول.

⁽۲) • ب، ظ: فأول ما يبدؤ. (٣) * ب، ظ: حيل مصحح حديثاً جز في

للحدُّ من فَكُ الْأَسَدُ في العَقْرَبِ الى مَصِيْرَهُ فالسهَيْلُ يهدي لخوريا مجراك خن العَقرَ ٥٠٠٠ في مَغْرِب الإكليل إجْرِ وأَفْتِكِ]* وَهْيُ عَدَنْ في التَّير دَوُّمْ وآعْدُنْ ومِنْ عَدَنْ للعَارَةِ الجَوزَاءُ ومنْ شاطىء العارةِ لا تُكَابر إِنْ لَمْ تَكُنْ معاوداً محققاً كبيرةً الْأَقْفَافِ سودا في النَظَرِ • طريقُ تَسْتبعِدُ خُذْ أُوصافي • فَحَذْرَكَ منَ الذُّبَابِ والسلام إِنْ شِئْتَ أَنْ تُرْسَى هَناكَ فَأَفْعَلَ

 ٨ إنْ لَمْ تُرِدْ تازمَ برَّ العرَب ٩ وإنْ تَكُنْ تُطْلِقُ رَأْسَ الحدُّ ١٠ ومِنْ مَصِيْرَهُ يافتي مُجَرَّبُ ١١ [من خُورِيَا أَيا أَخِي لِفَرْتَكِ ١٢ مِنْ فَرْتَكِ إِجْرِ الى مصر اليَمَنْ ١٢ اعنى مغيبَهُ أَيُّها العلماءُ ١٤ أَيْضاً ومجرى الباب نَسْرُ الطَّائِر ١٥ لاتَجْرِ بالليـل أُخَيُّ وأرفُقَـا ۗ ١٦ وقيلَ تَأْتِيكَ مِيُونٌ تَشْتَهِرْ ١٧ وبينها يا صاح والأثافِ٠ ١٨ إِنْ جُزْتَ ذَاكَ النهجَ باغيَ الشامُ ١٩ والبابُ مرسى أَزْيَب شمال

وقَصْدُكَ الزُّقْرُ فَهَى النَّعْشِ آقْدِم إِنْ كُنْتَ باغي الزُّقْرَ مِنْ ذا الباب مِنْ جاشُّ الى جرونَ يا ذا العَزَا ۗ

39 [الديرة من باب المندب الى جدة] ٢٠ وأَعْلَمُ إِذَا أَطْلَقْتَ بِابَ الْمُنْدَمِ ٢١ لكن حذار الثور مع ذُبَابِ ٢٢ كمثل ما تحذر رأسَ جزًا

⁽١٦) * ت : الصراء البديل من ب ، ظ .

⁽١٧) ، ب، ظ: الأثاثي.

^{**} ب، ظ: وصاتي

⁽١٨) * ت : فاحذرك من دباب ظ : الشام من بدير والسلام . ب : قاحذرك من بدير والسلام .

⁽٢١) * ت: لكن احذر.

⁽٢٢) * ب، ظ اللغزا .

⁽۱۰) * ب، ظ: مصيرة خوريا .

الأصول: لقرتك.

^{***} ب ، ظ : مجرب مجرى صحيحاً للأنام . ت: ميخ العقرب.

⁽١١) * زيادة من ب، ظ.

⁽١٢) * ت : ومن، التصويب من ب، ظ.

⁽١٣) * ت : المغيبات . ب ، ظ : المغيباه .

⁽١٥) * ب، ظ: ارمقا.

مِنْ رأْسِهِ الجاهي فلا تكذُّب عروك ساكنون ياحبيبي دِيْرَتُهُ في القطب يا رفيقُ للباضع الزُّقْر يا رشيدى للغرب والشَّرقِ فَدَعْهُمْ وآجْر في مَغْرب العَيُّوق بالعِيانِ فيها المراسي للخبيرِ آلُوانُ يَظْهَرُ لَكَ شِعْبٌ فَجُزْ وطَالِع وبينهم طريق فيها الخيرة والعرقُ * أيضاً بين *** تحقيقُ مِنَ الْأَبَاعِلْ ترها في الشُّرْقِ به مراسی کلً ریح کانًا كفاك ربِّي الضُّرُّ والتَّعسيرَا يَنْقُصُ رُبُعاً بِاجْتِهادٍ وآشْتَهَرْ في ذلك المكانِ بالتّحقيق وآدْخُولُ لَجُدُّهُ بَنْدر الْأَعْزاز مِنْ جاهِ سَبْع * مِلْ أَيا رفيقًا إَجْر سَوَاء حَافظٌ لَك ربي

٢٢ والزُّقُرُ مرسى للشَمَال وآزْيَب ٢٤ في رأسها الجاهي مِنْ المغيب ٢٥ بينَـهُ في أَمْكِنَـةٍ طريقُ ٢٦ من نصبٍ للعري للحديدِ ٢٧ وفي سُهَيْليهِ بَنَادِرْ فَادْرِ ٢٨ الى الأباعِلْ وإلى سيبان ٢٩ أَمُّا الْأَبَاعِلْ فَهْيَ يَا رُبُّانَ ٣٠ لكنَّ يا رُبَّانُ في المطالع ٣١ وَهُوَ بُعَيْدَ طَنالَم * الجزيرة ٣٢ والجُزْرُ في غَرِبيَّهَـ اللهُ طريقُ ٣٣ وأُمُّ شَيْـطانُ طَحْـلَةً بـرقُ ٣٤ وإِنَّ تُخَلِّفُهُمْ تـرى سيبانــا ٣٥ من أيُّ صوبٍ جثَّتُهُ فسيَـرا ٣٦ ومنْ هناكَ آجْرِ لِجَاهِ آحْدَ عَشَرْ ٣٧ والصُّـدْرُ في النَّاقة والعَيُّوقِ ٣٨ ومِـلُ على المطلع للحجـاز ٣٩ أَوْ شِئْتَ أَنْ تُقَصِّرَ الطريقَا ٤٠ في النَّعْش والفَرْقَدِ ثُمَّ القُطْب

[•] ب، ظ: الشرق.

هه، ب ظ: خبرا.

⁽٣٣) ♦ ت : وام سيبان وطلة ، تصويب ب ،

⁽۲۹) ده سنظ: تسمأ.

⁽٤٠) * ت : حفظك ، البديل من ب ، ظ .

⁽٢٦) • ت : نصير ، التصويب من ب ، ظ .

ب، ظ: للبالم.

⁽۳۰) # ب، ظ: فجرى.

⁽٣١) 4 ب، ظ: طالق.

⁽٣٢) ، ت : وحذرك في هذه ، التصويب من

ترميكَ دونَ القصدِ ذي المَطَالِقُ ٤١ أمَّا إذا عاينتَ جُـزْرَ الدَّانِقُ ٤٢ وإن تُرَ العرماء والجديرًا إجر على الناقة كُنْ جديرًا ٤٢ الى خُمَيْس * ثُمُّ مِلْ لِلْأَسْوَدِ وَأَحْلَٰوْ مِنَ الْأُوسَاخِ ثُمٌّ وَٱبْعُدِ ذَكَرْتُهَا مُخْتَصِراً فلا عَجَبْ ٤٤ فهذه الطريقُ تجريها الخَشَتْ وتَتَبَعِ الصَّوْفَةَ إِذْ تــراهـا ٤٥ إِنْ تَجْرِ يَا رُبَّانُ فِي سواها ٤٦ والسطُّرْقُ غَيْدُ هــذهِ كَثِيْدَهُ لكنُّها مُتْعِبةٌ خَطِيرَهُ وما تَركُ شيئاً • يصفْهُ مثلي ٤٧ وقد ذُكَرْهَا والدي مِنْ قبلي كلُّ نواحي البرِّ بالتَّمام ٤٨ مَيْمَنَةً ومَيْسرة للشام الغَرْبَ والأوساطَ ثمَّ الشَّرَقُ] ٤٩ [بَيْنَهُمَا يُوْصِفُ خَمْسَ طُرُقٌ دونَ سواه [إنَّه باللَّجَجْ٠] ٥٠ [لكنني أختصرت هذا النهج مساعدٌ شامي قَوِي مشتدُّه ٥١ وهــذه الطريقُ فيهـا المدُّ ٢٥ وإنَّما تَصْعُبُ طُرْقُ الشام فإفهم الطرقات بالتسام

ثمَّ السَّرَيْسِ ماذَكْرُها غيري لأَنها ماهِيْ طريقٌ سَالِمَه في فردِ حَنَّ هاك صِدْقَ خبري مِنْ حدَّ سيانٍ بها السَّمَاحَه في البارِ والنَّاقَةِ لا سواها رأسٌ كبيسرٌ بَيْنَ غُبُتَيْنِ

الديرة من سيان الى القصير والسويس]
وديسرة البر إلى القصير والمربايين ولا المَعالِمَه هم وَنَ الربايين ولا المَعالِمَه هم تَعْمَدُ لَلْ تجري المَعالِمَة الشَّعبان أَنْ تجري و أمَّا طريقُ يا أخي الباحَه و لرأسٌ أي مُحَمَّدٍ مجراها هم رأسٌ أبي مُحَمَّدٍ مجراها لعين محمد للعين للعين للعين للعين المحمد العين المحمد المحمد

⁽٤٩) ﴿ زيادة من ب، ظ، اسقاط في ت.

⁽٥٠) • ب، ظ: باللج ، زيادة من ب، ظ،

اسقاط في ت. دده معدد د مساد بالديا مد بيينا

⁽٥١) * ت: مسداد، البديل من ب، ظ.

⁽٥٣) ♦ ب، ظ: البرين للقصير

 ⁽۲۳) • ت : خمسین ، التصویب من ب ،
 ظ .

 ⁽٤٧) ، ب ، ظ: وقد ذكرتها والذي ،
 به ب ، ظ: وما رأيت أحد .

⁽٤٨) * ت : كذا البديل من ب، ظ.

 ٥٠ غُبَّةِ إيلا ثم غُبّة الطُّور ثم ١٠ ومنه للسُّويْس خُلْ أَوْصَافي ١٦ أمَّا القصيرُ فَهْوَ برُّ الرِّيفِ ٦٢ بينَ السُّويْس والقصير يا أخي ١٢ واسْمُ ذي الطريق هُوَ غَرَنْدَلُ ۗ ٦٤ مُقابِلَهُ في البِرِّ بَلْدُ القُلْزُمِ ١٥ ومِنْ هنــاكَ يَسْتَضيقُ البحرُ ٦٦ فهله الطريق من سيان ١٧ بها الظّهارُ فِي والنَّعْمانُ ١٨ وإنْ تَرَ القصيرَ والنُّعمَانُ 19 لَكِنْ تَحَـلُرْ أَيُّهَا الـرُّبُّـانُ ٧٠ والبعضُ قالوا البارُ منْ نُعْمَانِ ٧١ شَدْوَانُ هِيْ جزيرةً ياسَيِّدي

41 [ديرة بر بربره] ٧٧ ويعدُ ذا ديْرةُ برُّ بربرُه ٧٢ مِنَ السَّعِيدُ لِقَرْيةِ الشيخ معا ٧٤ مِنْ قَرْيَةِ الشيخ يدورُ البَر

إذ آسمُها والله مشهور الملا مشهور بأَزْيَبِ مُوْلِمِ يَبْقَى صافي٠ على البسار فانهَمَنْ تكييفي طُرْقٌ كثيراتُ الأُذَى والوَسَخ * مَغْطَسُ فِرْعُونَ اللَّعِينِ يُنْقُلُ هِيْ قَرْيَةً كَانَتْ بِهَا البحرُ سُمِي ويلتقي بحر الحجاز ومصر لراس أبي محمَّدِ با آخواني كلُّهمُ بمصر لَمْ يبينوا أَيْحِرْ على العيُّوقِ يا رُبَّانَ مِنَ القصاصير منعَ الشُّعْبَانُ يرميكَ في البَّحْرِ على شُدُّوَانِ في البحر عَنْ راس * أبي محمَّدِ

فسوف أَذْكُرُ شرحها وأَشْهَـرُه فديرة البر المغيب فآسمعًا في مَغْرب النَّعْش لرأس بَو

⁽٥٩) * ب، ظ: ابد.

^{**} ظ: الطيور.

^{***} ت: فاسمها ، البديل من ب ، ظ . (٦٠) * ب، ظ: ينقافي .

⁽٦٢) * هذا البيت مقحم في نص النسخة

البحرانية . انظر حاشية البيت ١٣٧ من هذا القصل .

⁽٦٣) * ت : الطريق هي في بديل ، ب : الطريق ذي غرندل ، ظ: الطريق غرندل . (٦٧) * ب ، ظ : كلهم نصفين لم ينبانا . ت :

⁽٦٨) * الأصول: الجدير.

⁽٦٩) * ت : الخفافين ، ب ، ظ : الجهانين .

⁽٧١) ، ب، ظ: في الراس راس.

٧٠ أيضاً الى الجين أيُّها السُّفَّارُ ٧٦ فينبغي الإنسان ذو التمييز ٧٧ ومنْ هناك يبا أخي للشام ٧٨ لولا يطولُ الشرحُ كُنَّا نَشْرَحُ ٧٩ ونشرحُ الأماكنَ المُضِيَّفَ ٨٠ لكنَّ هــذا دَرَكُ الـرُّبِّـانِ ٨١ وبعدَ ذَا أَذْكُرُ وَصَّفاً ثَاني ٨٢ منَ السُّعيدِ في طلوع * الرامحُ ٨٣ مِنَ الجزيرة لنواحي الهجرَه ٨٤ مِنْ فِيْلُكٍ إِجْرِ لِبَنْدَرْ موسى ٨٥ مِنْ هَجْرَةٍ لفيلُكِ في الرامِحُ ٨٦ وإنْ تُردُّ منه الى* حـافونى

42 [ديرة مل بر الزنج]

٨٧ وديرةُ الزُّنْجِ لها السُّهَيْلُ ٨٨ مِنْ جاهِ خَمْس ماشيا لِمَنْفِيَهُ ٩ ٨٩ أمًّا إذا صرنَ النعوشُ عَشرا ٩٠ إِنْ لَمْ تَكُنْ خَابِرَ ذي المكانِ ٩١ الى سُفَالَهُ ، ونُعُوشُ خَمْس ٩٢ لَمْ تَلْقَ بَرًّا فِي السَّهَيْلِ عَنَّهُ

لْكُورُ حَدْار الكبس والعوارُ يحاذرُ الأوساخَ يا عزيزي فالأغْلَبُ العيوق يا همامي٠ جميع ما عنه الثَّقاتُ صَحُّحُوا وَنَـذُكُرُ الجُزْرَ على الحقيقه فَافْهَمْ • تَكُنْ عَلَامَةَ الزَّمانِ ينفُلُهُ رُبَّانُ عَنْ رُبَّانِ لرأس خَنْزِيْرَهُ * طريقٌ واضِحُ في مَطْلَعِ النَّجْمِ فَسِرٌ بِخَيْرَهُ * في مُطْلع الجوزاءِ يا رئيسا مجرى لها للقاصدينَ واضِحْ في مطلع السُّهَيْل باليقين •

مَغْرِبُهُ فَأَقْصُدُهُ لَا تَمِيلُ أيضاً وللأخوار فَهْيَ صافيه تَجْذِبُكُ الشُّعْبَانُ عَنْ ذي المجرى فليس يَهْديك سوي الرُّبّانِ هُوْ آخرُ البرُّ فَلَتْكَ نَفْسي مَلْ جانتُ القُمْ يعيدُ عَنْهُ

⁽٧٥) ♦ ب، ظ: وراس الجين. ت: الى

⁽٧٧) ، ب، ظ: بالألهام.

⁽۸۰) * ب، ظ: ولو.

⁽۸۲) بع بن ظ: بلاد.

الجزيرة .

⁽۸۲) ، ب نظ: مجره.

⁽۸٦) د• بنظ: بلد.

ب ظ: على الصين. (٨٨) * ت : ماميا لمعه ، البديل من ب ، ظ .

⁽۸۹) * ب، ظ: تحدك.

٩٣ وَقُدْ رُوى : آخرُ برِّ الْحَبَشْ ١٤ فَقُمْ هُوْ مَنْبَعُ نِيلٍ مِصْرِ ه ٩ لا حاجنا الله وكلُّ مُسْلم ٩٦ وفي حديث يافتي غريب ٩٧ آخِرُ يارُبَّانُ جُزْرِ المفربُ ٩٨ وبينهُمْ مسافةً بعيـدَه ٩٩ وقيلَ كان في قديم اللَّـعَرْ ١٠٠ أيضاً وياتون لبر الزُّنْج

بُنْدُرُ شَجْرَهُ عِندَ فَقْدِ النَّعَشَ عَن ابْن حَوْقل الهمام الحبر لذا المكان الخطِر المُظْلِم مِنْ ثُمَّ للشَّمالِ والمغيب بحرُ اوقيانُوسِ سُهَيْلِيْهِ الوَبِيْ مسيرُ شهرِ بهُوَى شديلَه مراكبُ الإفْرَنْجِ تاتي القُمُرْ والهندِ نَقْلًا عَنْ ذوي الإِفْرَنْج

> 43 [ديرة جزيرة القمر والجزر المجاورة لها] ١٠١ والقُمْسِرُ أَوَّلُـهُ مِنَ الشَّمِسَالِ ١٠٢ أعنى براس الملح يا همامً ١٠٣ وقالَ بَعْضُ إِنَّه أَثْنَا عَشَـرٌ ١٠٤ وبينَهُ وقايلُ أزوامٌ عَلَدُ ١٠٥ وأَنْجَـزِيْجَـة بينهـا والبـرّ ١٠٦ أيضاً كُمُوني وكذا مُلالي ١٠٧ كذا مُوتُو عَشْرةً مَعْ نصف ١٠٨ وغيرُها في البرُّ جُزْرٌ جمًّا

نعوش أحد عَشَر بلا مُحَال تَعْرِفُهُ الأعرابُ والأعجامُ أمَّا المغيبيُّ هُوَ نَعْشُ آخَدُ عَشَرُ ستُّه وخمسون وما فيها نَكَـدُ هِيْ أَشْهِرُ الجُزْرِ فَخُذْ مِنْ خَبْرِي نَعْشُ أَحَدُ عَشَرْ بلا محال • هِي أَشْهَرُ الجُزْرِ فَخُذْ من وصفى * بعض سُمِي والبعض لا لم يُسما

⁽٩٣) ، ب ، ظ: فوت .

⁽٩٧) ، ب ظ: العرب .

ت: بحر اوقانوس وسهیلیه اأوبی، ب، ظ: في اوقيانوس وسهيل الغربي . (٩٨) ٠ ت: شهرين . ب، ظ: شهر .

⁽۱۰۲) ، ب ، ظ: بقرفة .

⁽١٠٤) • ت: بابل، التصويب من ب ظ.

⁽١٠٥) ، ف ب، ظ: والجزر يأتينه .

⁽١٠٦) و(١٠٧) * هذا البيت مقحم في النسخة البحرانية . انظر حاشية البيت ١٣٧ من هذا القصال

يعلَمُهُ مُنَزِّلُ الإنجيارِ ولا قياساتِ ولا مطالقًا ومَنْزلِ السُّلطان والجزاشرِ في غير هذا الفصلِ بالحقائقِ والما هنالكُ صُلبُ المسيرِ قليلُ مَنْ يرويه بالتجريبِ دِيْرَهُ جَنوبيَّهُ سُهَيْل فاتَبْعِر هذا هو الظاهرُ يا بصيري بِنْ سام بِنْ نوح أبينا الثاني

* * *

١١٨ وهـ و له بحـرّيه جـزائرُ ١٩٩ أيضاً وأفشاتُ مع شعوبِ ١٩٠ اثني عَشَرْ زاماً أيا معلَّما ١٢٠ لم يُعْرَفْ كم [هيْ] عليها النعشُ ١٢٠ لكنَّما تُحْبِرُك المطالقُ ١٢٠ أمًّا ربابينُ نـواحي القُمْرِ ١٢٠ أمًّا ربابينُ نـواحي القُمْرِ ١٢٥ والبعضُ قالوا القُمْرُ والزُنْجُ معا ١٢٦ يـ ونَ مَنْ زَلُ إذا تـوسَّطا

مما يلي الفال لها أماير وكونها عنه الى الجنوب جُرْرٌ كبارٌ نايفات للسما مجهولةً لها مكانٌ وَحْشُ مُعهُمْ لها مطالقٌ باحادقُ من سالف النَّهْرِ القديمِ المُدْبِرِ إذ لم يغيبِ النَّهْسُ لم يتقطعا بين جنوبهم كُفِيتَ الغلطا"

⁽١١٣) ، ب ، ظ: والماء كدي .

⁽۱۱۵) 🛊 ب، ظ: اربعة .

ر (۱۱۹) ه ب، ظ: انسات.

⁽١٢٠) هب، ظ: فاثقات.

⁽۱۲۱) * زيادة من ب ظ .

⁽۱۲۲) * ب، ظ: لكيما تجريك .

⁽۱۲٦) * ت : الغطأ . التصويت من ب ظ .

شعبانه والموج والمد عَجَب الْجَلْ بحر أُوقانوس عل قُرب الْجَلْ جنوبي السُّودان تَركُ فاعلم نعشُ آصبع بندر كوري فاعلما نعشُ آصبع بندر كوري فاعلما ما بين راسين فَخُدْ من قولي ومنزلا جي نَعْشُ عَشْرة تُدُكّر عُسرون زاماً ذكروه العُلَما أوساخ مَعْ شِعْبانِ ثمَّ جُزْرِ للله الله يرى النموش عاليه فسوف أذكر بتاسع فصل

17۷ لكنه مكان ضيق وكرب
17۷ إن قَد الله لفلك ودَخل
179 ما عنده صوى برور الكانم
170 وقبل أقصى القبر يا معلما
171 أقصى الشمال وهو لولوجان
171 في غُبّة تُكليك بالسهيل
177 عني براس الملح إحدى عَشْر
170 وقبل غِلْظُ القَمْر يا معلما
170 نعوش سَيْع ورقيق البحر
170 عتى يجي عِنْك نُعوش ثمانيه
170 على ورقيق البحر
170 عقى يجي عِنْك نُعوش ثمانيه
170 الحالى الأصلي
الإحلى الأصلي
الإحلى الأعلى الأعلى الأصلي
المحد ورقيق الأحلى
الإحلى
الإحلى

⁽۱۲۸) 🛊 زیادة من ب ظ .

^{* *} ب ، ظ : دقيانوس مع قصر .

⁽۱۳۰) * ت: سما، البليل من بظ.

⁽١٣٢) * ت : تكليك ، ب ، ظ : اتكى لك .

⁽١٣٣) * ب، ظ: ومنزلًا في .

⁽١٣٥) • ب، ظ: بأنَّه حوالَى .

⁽١٣٦) و(١٣٧) ه هذان البيتان مقحمان في النص مع الأبيات ٢٦، ١٠٧، أؤذا حلفت الأبيات المقحمة أصبح عدد هذا الفصل ١٣٣ يتاً تماماً كما ورد في الفصل المحادي عشر من الحاوية في البيتين ٩٩

القصيل السيادس

في معرفة دير بر العجم والهند والشُّوليان والنَّات والبنج [والسيام إلى تحت الربح كبليطون والمهراج] والصين والغور ، عما صحَّت عنه الأخبار

44 [دير ير العجم]

والهند والسَّيام للمُصَادِسِ إِجْرِ على السُّهَلِ بالتمكينِ وقَيْلُ أَن تُوصِلُهُ أَحْذَرْ جزًا للسَّندِ في الجوزا ويلُ للنَّسْرِ فالبعض للجوزا وبعض عنه زَلُ لا بُدَّ أَنْ تجريْ بها يا فالحا لم يُعْرَفِ الفَدْمُ مِنَ العَلَمَاءُ

١ وبعد ذا أشْرَحُ برُ فَارِسِ والهند والسَّيامَ للمُمَسارِسِ
 ٢ أوَّلَ ما تُطْلِقُ مِنْ جَسُرُونِ إِجْرِ على السَّهَيلِ بالتمكينِ

٣ حتى توافي جاش يا معتزًا
 ٤ ومِنْ أعالى راس جاش آجر

وين الحالي راس جاس الجراس
 الأن هاي ديرة فيها خَلَلْ

٦ لم أر في أبايها مَصَالحا
 ٧ إذْ في زمانيْ كَثُرُ الجُهَلاء

45 [دير بر الهند]

٨ وديرةُ البرِّ مِنَ السَدْيْبُولِ الى مَهَايِمْ فاسْتَمِعْ مِنْ قُولِي

ت: المهراج ، ب: التخ ، التصويب من (۱) ♦ الأصول : بياتها

· (٧) * ب ، ظ : لم يعرف العلم من المعلم .

♦ ♦ زيادة من ب ظ.

(A) * ب، ظ: الديول.

(٣) * ب، ظ: وبعد.

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ومِنْ مَهَايِمَ أَقْصُدِ السُّهَيْلاَ وبعضُهُمْ قال الى كُمَهْري مِنْ كُوْلَمَ العقربُ فأخْرِمْ وأجْرِ لقايسل حَقَّقْ ولا تُمادِ ومَمْلِع الظّليم في الفَطِيَّه في مَطْلع السَّماك جُرْه وأغْنم ٩ إِحْلَرْ عَنِ الْعَقْرِبِ أَنْ تميلا
 ١٠ الى بَلَدْ كُولَمَ مجرى البَرَّ
 ١١ وقالها الشُّولِيُّ الى كُمَهْري
 ١٢ ومن كُمَهْري في طلوع البالإ
 ١٣ في مَطْلع الواقع بالسوية
 ١٤ ومن كُمَهْري مَطْلَقٌ لِشُلمً
 ١٤ ومن كُمَهْري مَطْلَقٌ لِشُلمً

46 [دير سيلان]

الى مُراشى فهو في العَيُّوقِ
مِنَ الشَّمالُ آخرُ السَّيلانِ
في الماء مناق فَتْنَ فحافِر
في آخرِ المَمْرض عاهماما
مُسْتَوْكِداً للشُّلَم لا تسيرِ
كفاكَ ربِّي البُّعَدَ والطُّوفانُ
لِنَحو طُوطاجامَ قَلْبُ العقربِ
لنحو دَنُورِ بـلا مـراءً في مَطْلع التَّيرِ وكُنْ جسورا

١٥ أمّا مِنَ الشَّلَمِ بالتَّحقيقِ
 ١٦ راسُ مُراشي فهو يا إخواني
 ١٧ منها على مَثْرِبِ نَسْرِ الطَّائر
 ١٨ بينهما أربعَة أزواما
 ١٩ وإن تكن في مَرْكب كبير
 ٢٠ وآغبُر على الجنوبِ من سيلان
 ٢١ إنْ كنتَ طالِقاً كُمَهْري فاصْحَبِ
 ٢٢ [من نَحْو طوطاجام في الجوزاء
 ٢٢ وآجْرِ مِنَ الطُوطَة الى دَنُورا
 ٢٢ ومن هُناك إلزم السَّماكا
 ٢٢ ومن هُناك إلزم السَّماكا

(١٤) ♦ ب، ظ: مم.

(٩) • جميع الأصول: احزم.

(١١) ، ب ، ظ ؛ لنحو فالي موك .

⁽١٧) ، ب ، ظ: المل.

 ⁽۱۸) * ت : المفرط . تصویب ب ظ .

⁽۲۲) ، زیادة من ب ظ .

⁽٢٤) • ب، ظ: الزم، ت: الرامح.

⁽۱۲) ♦ ب، ط: رامن اجر یا ذاکی . • • ب ، ظ: رامن اجر یا ذاکی .

^{● ♦} ب، ظ: اجر. (١٥) ♦ ظ: السيام.

⁽١٦) * ب،ظ: اما.

ان ششت تَعْبُرْ بينهٔ والبَسرِ
 وإن تكن طالِق لوامَنْ منها
 اتيك تِسرُكُنا مَلِه يَساوا
 مُورب الواقِم الى مُواشى

فَاغُرٌ وَلاَ تَخْشَ به مِنْ ضُرُّ في مَطْلع النَّعْشِ فَاحَفَظُنَّها فَبَدُّل ِ المجرى وكُنْ يَسَّارا ُ وقال في العَيْوقِ بعضُ الناسِ

47 [دير البر الغربي]

٢٩ وين مُراشي ولاكرا كوري ٢٩ أيضاً الى مُتَبَلَ قُطْبُ الجاء ٢٩ وهو لَهُ من راس ناكَ فَتُن ٢٩ صماتُهُ شِعْبُ عليه الماء ٢٣ ومنه في الناقة الى جُدَاوَدِي ٢٣ ومنه في الناقة الى جُدَاوَدِي ٢٥ اعني : فَشاشُ يَسْعَةُ ونصيف ٢٣ عني : فَشاشُ يَسْعَةُ ونصيف ٢٣ عني القطب إخدَرْ أَنْ تزيغَ المجرى ٢٧ قابِلَة جمالُ دَسْدي بَحْرا ٢٨ جمالُ دَسْدي بَحْرا ٢٨ وبعضهُمْ يستركه يَعينا ٢٨ وبعضهُمْ يستركه يَعينا ٢٩ وبعضهُمْ يستركه يَعينا اليه ٢٤ ومِنْ فَشَاشِ يا اخي الله ٢٤ ومَنْ فَشَاشِ يا اخي الله ويه ومَنْ فَشَاشُ يَا النّه يَرَقي الفَنْجَرِي

في القُطْبِ مجرى صادق المسير أعني لَكُ الجاه ستَّة زواهي في مَطْلِمِ الْفَرْقَدِ بالتَّمَكُن مَالسُواء مَلهُ مَسْدا فَتَن بالسُواء مطلعها قصدي فلا تكابِر مطلعها قصدي فلا تكابِر منه الى فُوفَلَمَ خُلْ مِنْ وصغي فوفَلَمُ الجاهُ يكونُ عَشْرا بينهما طريقُ فيها البُشْرَى* عَشْرا بينهما طريقُ فيها البُشْرَى* عَشْرا ومني عند الضروراتِ فكنْ فَطينا عند الضروراتِ فكنْ فَطينا في مَطْلِع النَّعْش فَيرْ لَدَيْهِ* إذا رَاهُ مِلْ وَفِي النَّعْش أَسْرٍ**

(٢٩) ، ب نظ: ومن مراشي لأكرى كورى .

(٢٧) ، ب نظ: سيار.

(٣٢) ، ب، ظ: تأتيك.

⁽٤٠) * ت: اليه، البديل من ب ظ.

 ⁽٤١) • ت : يعلق الأحبار . البديل من ب ظ .
 (٢٤) • ب ، ظ : قبل ان تصله .

⁽ع) ت بالي راس مل وفي النعش اقرب البديل

ه چات : ابني واهن من وفي النافس افوت البدا من ب ظ .

⁽٣٤) ♦ ت : ذا ماس ، ب ، ظ : جساش .(٣٧) ♦ ت : اليسر ، البديل من ب ظ .

٤٣ وآثرُكُهُ يُمْناً وآقصدنٌ بندرَكُ ٤٤ والبُلْدُ لا يَفْطَعْ هناكَ كَلَا ه؛ وإنْ تَكُنْ تُطْلِقْ مِنَ الكَنْفارِ ٤٦ تماتي لِسُنْدِيْب وفَارَدِيْب ٤٧ عليهما الجاه أَحَد وعَشْرُ

بُنْجِالةَ الْأُولِي وصدِّقْ مُخْبِرَكُ ولا تَسْر وَقْتَ الظلام أصْلاً وفي السَّماكِ أنْتَ منْهُ جاري جَـزيـرَتَيْن هُنَّ لـلأديب وفيهما الناس كثيراً يَذْكروا

48 [دير البر الشرقي] ٤٨ مِنْهُنَّ في التَّيرِ الى بَنْجَالَه ٤٩ والجاهُ فيها عَشْرَةُ ونصفُ

٥٠ أمَّا الأوالي حكموا إحدى عَشَرْ ١٥ أمَّا الذي يِأْخُذُ قُرْبَ البِّرِّ

٢ه منها على القُطْب لِزنجلاتِ٠ ٣٥ مِنْ زَنْجِليًا خُذْ أَيَا خليلي

٤٥ والمطلقُ المشهورُ من نَجْراشي

٥٥ [من] ناجراشي لجزيرة فالي ٥٦ من [راس]* ناجراشي لِلُوطْبَانُ

٧٥ لأنَّ راسَ مَرطَبانَ مُنْحرفُ ٨٥ بينهما غتّ قليلُ الماء

بَنْدَرِ شاتي جامَ لامُحالَه والبعضُ قالوا: غيرُ هذا الوصفُ أعنى لكَ البُنجالتين فأختبر مِنْ خَوْرِ شاتى جام واجِبْ يَجْرِي منْ بَعْدِ أَنْ يُخَلِّفَ الآفاتِ لناجراشي مَطْلعَ السُّهيل " لِبُتُّمَ العقربُ يا ذا الماشي في مُطْلَع العقرب قال الشُّولي ••• في مَطْلعِ الشُّعْراءِ يارُبَّانُ دُونَ السَّيامَ كلَّه يا مُعْتَرِف إِحْلَرْ بأنْ تُقْبِلْ على الجوزاءِ

⁽٤٣) * ت: ، يمينك واقصد ، البديل من

⁽٤٧) ، ظ : الجاه احدى عشر حصروا . (٤٨) ، ب، ظ: اعني . ت: ايندر .

⁽۵۲) په ب، ظ: لزنکماتي.

⁽۳ه) پ ب ظ: من جزر تکملات.

^{. •} ب ، ظ : من جز تكملات يا خليلا لراس

نكراشي خذ السهيلا. (٥٤) * ظ: ليتم.

⁽٥٥) * زيادة في بظ.

^{• •} ت: من، التصويب من ب ظ.

^{* * *} ت: قال الشولي ب، ظ: قال للسومال .

⁽٥٧) ♦ ب، ظ: كن.

٥٩ إِنْ لَمْ تُردُ فَيْجُوْهَ أَو كَشَّميرا ١٠ لِمَـرْطَبانِ ثُمَّ سِـرٌ لفالي.

لا تتركن الشُّعرى العَبورا ا مجراكَ صَحّ القُطْبُ لا محال؟

49 [دير بر السيام وجزر تكوه]

١١ مِنْ فُــُوْلــوا تُــواهـَى الِنُتُمـــا ١٢ أيضاً وتَكُون أيُّها الرُّبِّانْ ٦٣ ومَنْ أَرادَ تَكْسَوَة من بُتُمِــا ١٤ الى قفاصي الهم المجاري ٥٠ والمَطْلقُ المشهورُ خُذْ أخباري ٦٦ وإن تكن يامُعْتني هذا الفَنْ ١٧ إجْرِ على مُطْلعِ قُلْبِ العقرب ٦٨ مِنْ دَنْجَ دَنْجَ وَفُلُو سَنْبِيْلَنَ ٢٩ أمَّا إلى جُمْرٍ فَهُوْ العقربُ ٧٠ أمَّا شُمُطْرَهُ يا أخى قد جُرِّبَتْ ٧١ وقيال آخَرْ أوضَحُ السَّبيل

50 [دير بر الصين]

٧٧ وإنْ تَكُنْ تُطْلِقُ مِنْ شُمُطْرَه وقَصْـلُكَ الصِّينُ فحينَ تَسْرَا

إجْرِ على مَطْلَعْ سُهَيْلِ تَغْنَماهُ هُمْ جُزُرٌ جمٌّ بلا شِعْبان يُجْرى على مَطْلَعِهِ ليُغْنما في مُطْلع السُّهَيل لاتُمار من بُتُّمَ القُطْبُ لِتَكُوى بارى تُطْلَقُ مِنْ جُزْرٍ فُلُو سَمْبِيْلَنْ الى قفاصى وآجر هذا مَذْهبي٠ وبينَهُمْ إصْبَعْ فلا تَميْلَنْ ويَرْهَلَهُ لها سُهيلُ فاحْسِبْ٠٠ من تَكُون في السِّلْبار استُقربَتْ الى شُمطرَهُ قُطُبُ السَّهَيْل

(٥٩) * ب: الشعراء العبورا. ظ: الشعر

والعبور . ت : الشعرتي العبورا . وكله غلط . وما أثبتناه يستقيم الوزن معه دون أن

> تستقيم اللغة . (٦٠) • ب، ظ: للبثقاله.

(۲۱) تا بنظ: تسلم.

(٦٣) * زيادة من ب ، ظ . والبيت مقحم في

النص .

(١٤) ، ب ، ظ: قياسي .

(٦٧) ، ب ، ظ : واجر لها واحزب .

(٦٩) ، نا: الى خوهر فهذا المعقل،

ت : فهو العقرب .

(٧١) ♦ ب، ظ: قطبنا.

٧٢ إجر على الإكليل بالسُّرور ٧٤ وإِنْ تُخَلِّفُهُمْ فَاقْبِـلْ خَنَّا ٥٧ الى مَلَعْقَةُ أَسْتَمِعُ أَوْضاعى ٧٦ وتلتقى قَبْـلَ مَلاَقَـهُ فـأَفْهَمـا ٧٧ فُلْ بَاسَلَارُ هُوَ جَبَلْ قفاصي ٧٨ فيهِ مَفَارِضٌ يا أَخِي فإنْ تَرَ ٧٩ وإنْ تَكُنْ أَرْضَ مَلاَقَهُ طَالِقًا ٨٠ لِنَحُو سَنْجافـورَ فَٱرْحَـلُ منها ٨١ واجْرِ مِنْ بَيْكٍ لِنَحْوِ صُوْرَهُ ٨٢ والقُطُّبُ مِنْ صُوْرَة لشَهْرِنُوًا ٨٣ منْ شَهْرِ نُوْ لِكُمْبُسَا العَقْرَبْ ٨٤ ومنْ هناكَ آجُرِ الى شَنْفَاءِ ٨٥ وإنْ تَكُنْ مُجَارِباً للديرَ ٨٦ أَعْنِي لَكَ السَّلِي أَوِ السَّماكا ٩ ٨٧ منْ حدّ صُوْرَةٍ لكُمْبُسَا آدْنِ ٨٨ وأَجْرِ لها في مُطْلَعِ السُّهَيلِ ٨٨ أَيضاً وفي الْمُحْنِثِ ثُمُّ القُطْبِ

لِبَرْهَلَهُ أَيضاً مَعَ جُوهُ وَرِ على نُجَيم النّيرِ لاتّأَنَّي والماء عُنْلَكَ عَشْرَةُ أَبْوَاع قُل باسَلَارُ [مَمَ] القفاصي فأعْلَمَا أَمًّا قَفَاصِي شِعْبُ فِي الما راسي فُلْ بَاسَلاَرَ في السَّباكُ فَأَشْكَرُا فَكُنْ على النَّيْرُ يا أَخِي واثقًا لِنَحُو يَيْكِ في النُّعُوشِ عنها على مَغِيْبِ السُّبْعَةِ المشهورة يُمْنَى نِمَا ويَسْأَرُ نَـوًا ** ديرَتُكَ في مَطْلَعِهُ لا المَغْرِبُ على طلوع نَعْشها الكبراءِ وتلتقى الريخ بهما غسيرة والمطلعي العاصف الهلاكا وأَرْسِ في البَحْرِ بَحْرَ بَرْني• منْ شَهْرِنُوْ إِصْبَعَ يَا خليلي لَأَنْها كبيرة بالقُرْبِ[•]

⁽٧٣) * ت : جمهوري ، البديل من ب ، ظ .

⁽٧٥) ♦ت : ملاقة ، البديل من ب ، ظ للوزن .

^{. 🕹 (}۷۲) 🛊 زیادة من ب، ظ

⁽۷۷) ، ب نا: فيض.

⁽۷۷) لا ب ب الد الشيال .

⁽٧٩) * ب، ظ: على نجيم التير حقاً .

⁽٨٠) * ظ: لأن.

⁽٨٢) ♦ ت : في القطر ، البديل من ب ، ظ .

ب: هذا الشطر غير معجم.
 ب: ظ: يميناً نما ويساراً انوا وكله تصحيف.

⁽۸۰) ♦ ب، ظ: ومن . (۸۱) ♦ ت: الشمال . البديل من ب، ظ.

 ⁽٨٦) ♥ ت: الشمال . البليل من ب ء ظ .
 (٨٣) ♥ ت : الهلاك . ت : الهلال .
 (٨٧) ♥ ت : وارس في البحر بجزيرة برئي ،

ب، ظ: وراس ما في البحر برني.

⁽۸۸) 🟶 ب، ظ: وجز.

[.] بالقطب ﴿ بَالقطب ﴿ القطب ﴿

وراسها خَسْنُ بِللا مراءِ والجاه خمس فيهما اللناظر على و جنوبي جَاوةٍ يا عَمْرُو ذَاكَ هُوَ النُّسُرُ المنيرُ الطالِمُ والجاهُ إِذْ سُمِيْ بها عشرونًا لِمُنْتَهَى مُلُكِ مَلِيسكِ الصين عَنْ تَجْرِبَهُ * [من] صينها والجاوي مساكنُ الأتراكِ با حبياً في جُزْر مُشْمِلَة هُنَاكَ تُمُوجُ

٩٠ وراسها الجَاهِي بِوَجْهِ الماءِ ٩١ من شَهْرِنُو في طلوع الطائر ٩٢ كَمِثْـل تَيْمــور وهُنَّ جُــزْرُ ٩٣ وديرَتُكْ منْ حدٍّ شَنْفا الواقمُ ٩٤ لِبَنْـ لَدِ الصِّين سُمِي زَيْتُـونَــا ٩٥ وترجعُ الديرةُ منْ زَيْتُونِ ٩٦ في مُطْلَع الإكليل قالَ الراوي ٩٧ وتتبعم الشمال والمغييسا ٩٨ فَثُمُّ ياجوجٌ مَعَ ماجوجٌ

* * *

٩٩ وإنْ تُرِدُ تَلْزَمَ فَرْدَ مجرى ١٠٠ لِشَهْرِنُوً والى هَاتُونِ ۚ أَيْضاً وقَلْتُونَ مَعَ عَلْتُونِ ١٠١ وبعدَهُمْ زَيتُون خُذْ سُؤالَكْ ١٠٢ ولا جَنُوبِيهُنَّ إلَّا وَسَخْ والغورُ قالَ القاضيُ الْمُورِّخْ "

مِنْ حدُّ سَنْجافُورَ أَخْرُجُ بَحْرَا وإسْمُ تَختِ مُلْكِهُمْ كُنْبَالَكُ



⁽٩١) * ت : صح ، البديل من ب ، ظ .

⁽٩٢) ، بنا كنّ .

⁽٩٦) * ت: عند تجربة، ب، ظ: عن

⁽٩٨) * ب، ظ: مشتمله تهويج. ت:

مشتملة هناك تموج.

⁽١٠٠) ، ب نظ : هيتوني .

⁽١٠١) * ت: سالك . البديل من ب ، ظ . (١٠٢) * لعلَّه ابن قاضى شهبه الدمشقى

⁽VYYI = AY31)

١٠٣ وبعد ذا الإقليم لَمْ تَلْقَ بَشَرُ ١٠٤ وبعد ذا الإقليم لَمْ تَلْقَ بَشَرُ ١٠٤ لأَنْهُمْ فِي طَلَوْفِ السانياء مدولاً سَمِعْنا غِيرَ هذي مَعْرِفَهُ ١٠٦ لقد تَمُّتِ الشَّرْقُ عَرْبُهُا والعَجَمْ اللَّيرَدُ عَرْبُهُا والعَجَمْ اللَيرِ

سَوِيَّة الخِلْقَةِ تُغْنِيْ مَنْ سَفَرْ * مُدِلُّهُنَّ العقلُ بالنَّهَا لها أسانيدُ سوى هذي الصَّفَه أَغْنِي برورَ المُلِّ بالصَّوَابِ وقَعْرَهَا والصَّينَ كلَّ قَدْ خُتِمْ تَرْكُتُهُ لذي الفَشَارِ [المُفْتَرِي]**

⁽۱۰۳) ه ت : شوبهة ، التصويب من ب ، (۱۰۸) ه ت : منني ، التصويب من ب ، ظ . عا زيادة من ب ، ظ .

هوب، ظ: للسقر.

القصسل السبايع

في معرفة دير الجزر ومطالقها والمهراج وشُمُطْره والفال والقُمْر واليمن وسواحل الحبشة والسومال والأطواح ومكران ، وما بينهم ، وما يتعلق بذلك عما صحت عنه الأخبار والتواريخ. والله أعلم بالصواب

51 [الديرة من ملاقة لجاوه]

لِنَحُو جَاوَهُ فَافْهُمِ الْأَشَايِـرَا ١ ومنْ مَلاَقَهُ إِنْ تَكُنْ مُسَافِرَا حتى تُخَلِّف عَنْكَ سِينًا في التَّفَرْ الى بَهَايَة أَظْهَـرُ السّبيل فيسنكَ معْ سَلْتَ * كريمَنْ جزراً من ذي الجزيرة من يديكَ البُلدا الى بهاية كى بفوز " تُنجى في قرب سَلْتَ زَنْجِي * فَلَمْ تَزَلْ الى الجزيرة فاسمع الدلايلا

٢ إجر على العَقْرَب تَحْظَ بالظَّفَرْ ٣ وبعد هذا مَطْلَعُ الإكليل ٤ لكرُّ تلقى قبلها في المجرى ه أيضاً وهَانُوهُ فَلاَ تَعَدَّى ١ ستُنَةَ أَبُـواع لِسَلْتُ زَنْجي ٧ الخوف كلِّ الخوف في هذا المَحَلَّ ٨ فيادر البللاثم مايلا

⁽٦) * ت: نهایة، تصویب ب، ظ.

[🐽] ب، ظ: ليست بفور: ت: بفرق.

⁽٧) ♦ ت: زنجلتا تصویب ب، ظ.

⁽A) * ت : فيادر البلد ب ، ظ : ميادراً للبلد .

العها .

کی ظ: الطواح .

⁽٢) * ب، ظ: سبتا. ت: شفا.

⁽٤) ، ب، ظ: لتكن.

^{**} ب ، ظ : في سنك . ت : سنج معاسل .

يَعْرِفُهُ كِلُّ ذَوِي الْأَسْفَارِ جُزْرٌ بَلِيطُونَ بِهَا الْعُودُ النَّقِي أَثْرُكَهَا عُسْك على اليسار وإجْر في مَطْلَعْ سهيل منها*** الى تُوَبْنَ ما بها منْ وَصَب ثم لِجَاوَهُ يَا أَخِي الْمَنْفُونَهِ فيها البَشَرْ طولَ الزمانِ حَاضِرَه أعنى فَلِيتِيْجَ صَحِيْحاً فَٱتَّبِعَه جَاوَهُ وَيَنْدَرُهَا فَكُنْ لِي صاغِي أَرْبَعَةٍ حتَّى تُغَيِّبُ في التَّفَرْ فَهْيَ طريقُ المُلُ للسُّفَارِ ثَلاثُ هُمْ في سُنْدَبَاري جَهْرا والنُّهُجُ ما بينهما لَدَى الدليلُ وَصَفَّتُها وصفاً على اليَقِيْن شُمُ طُرَةً ۚ فَكُنْ لِذَا مُلْتَفِتَا لِجَاوةٍ فَرَاقِدَ أَصْبَعَيْن واسمُهَا تُوْبَنُ وَهِي كَبِيْدَه بُنْدَرَ جَاوَهُ غانِماً مُحَصَّلاً

٩ لَأَنَّ هذا بابُ موسى بَاري ١٠ وسَلْتَ زَنْجِي خَلْفَها للشَّرق * ١١ وكلِّ هذى الجُزْر يا ذا السَّارى ١٢ الى بَهَايَهُ يا أَخِي أَيْمِنْها ١٣ ١٣ لِنَحْو تِيكَا ثُمُّ سِرٌ في العَقْرَب ١٤ ودُمْ على العَفْرَبِ لِبَيْكَاكُوْنَه ١٥ وتيكَكُوْنَهُ هِيَ جـزيرهُ عَـامِرَه ١٦ في القُطْبِ مِنْها لِفَرَاقِدُ أَرْبَعَه ١٧ وإنْ طَلَقْتَ تِيْكَكُوتَهُ باغِي ١٨ تَجْرِي على العَقْرَبِ أَزُواماً قَلَرْ ١٩ تَنْظُرُ ذاكَ الحينَ سُنْدَ بَاري ٧٠ وربَّما تَنْظُرُ تِلْكَ الجُزْرَا ٢١ مِنْدامُهَا للتَّير والإكليلُ ٢٢ ما بينَ أَطْرافِ الجزيرتين ٢٢ جاهي بجاوّة وسُهَيْلِيْ يا فَتَى ٢٤ واجْرِ في العَقْرَبِ نُصْبَ العين ٢٥ تلقى على بَنْدَرهَا جزيرَه ٢٦ فَآتُرُكَهَا عَنْكَ يَسَارا وآدْخُلا

⁽١٦) ها ب ظ: فليتيك.

⁽٢١) * ت : هندافها ، التصويب من ب ، ظ . ب، ظ: في التير...

⁽۲۳) ، ت ، ب ، ظ : شمطره .

⁽٢٦) ، محتلا، التصويب من ب، ظ.

⁽١٠) * ب، ظ: لشرق.

⁽١٢) * ت : نهاية ، التصويب من ب ، ظ ،

^{**} ت: يمينا، التصويب من ب، ظ. *** الاصول: عنها .

⁽۱۳) * ت: متوين . البديل من ب ، ظ .

⁽١٤) * ب، ظ: اقلم.

٢٧ إِنْ شِشْتَ جَرْشيكاً وَسَرْبَايَـه
 ٢٨ مخفاية الرسم لتخت الملك

هذي بَنَادِرْ يا أَخي عِطَايَه • في البـرِّ يومٌ بمسيـرٍ دَمِـكِ

52 [دير جزر تيمور]

٢٩ ولا جَنُوبِيها سوى تَصُورَه ٣٠ الى مَسِيْرة يا أَخي شَهْرَيْن ٣١ وَجُـزْدُ تَهْمُورَ كثيراً تُـدُّكَـرً ٣٢ ولا سُبِيْ يَنْدُرْ مِنَ الجَزَائِر ٣٣ بَلْ في تَوَاريخ الذينَ سَلَقُوا ٣٣ وقيلَ فَاتُـدًا قَابَلَتْ تَيْمُورًا ٥٥ وَجَاوَةٌ ديرتُها في المَقْرَبِ ٣٢ ثمَّ شُمُطْرَهُ عِنْدَ ذِيْ الْلِبلب

شَاشِيْ وَفَاسَا * جُزُرٌ كَثِيْرَهُ للشَّرْقِ وَالجَنُوبِ بِالْبَقِيْنِ مَنْ نَعْشَ سَتَّ لِنَعُوشَ آخَدَ عَشَرْ عنها جَنُوبِيها بِإِسْمِ ظَاهِرِ أَفْشَاتُ مَعْ جزائِر لَمَّ يُعرَقُوا في [نفس] مَظَلَفها فَكُنْ * خَبْرا مِنْ ظَهْرِها * صَحُ فلا تَكْذِبِ هذي صفاتي لَكَ بالصَّوابِ

53 [دير جزر اندمند]

٣٧ أَمًّا صفاتُ جُزْرٍ أَنْدَمَنْدِ
٣٨ ويننها وينن برَّ النَّاتِ
٣٩ وينها وتاندَنَّ والسَّنامُ

الجاهُ فيها خَمْسَةٌ لَمْ يَزْدَدِ خمسونَ مَعْ زامين عَنْ ثِقَاتِ ثَلَاثُ وثَلْثُونَ ومَنَّ بِالتَّمَامُ

⁽٢٧) * ت : عصابة ، ب ، ظ : مخفاية .

⁽٢٨) * جميع النسخ : الاسم .

⁽٢٩) ♦ ت : وفائد، ب، ظ: وفاسا.

⁽٣١) * ب، ظ: سبعة .

 ⁽٣٢) * ب، ظ: سوى . ت: سموا .
 ۱ ولا سموا فائدن في ، البديل من ب ،

ظ: ولا سوى بندر من .

⁽٣٣) * ب، ظ: خرائب.

⁽٣٤) ♦ ب، ظ: قايل.

خو زیادة في هامش ظ.

۵ ت : كن بذا ، البديل من ب ظ .
 ۲۵) * ت : من ظهرها بيان .

⁽٣٧) ♦ ت : لمن يرد ، البديل من ب ظ .

⁽٣٨) ♦ ب، ظ: واثنان .

⁽۳۹) * ب، ظ: یا زید،

^{**} جميع النسخ : ثلاثة وثلثون .

 ٤٠ وهي جزائِرْ فَرْدَةً في اليَمْ أَوْسَعُهَا يا صاح جَاهُ أَرْبَعَه ٤٢ ديرتُها مَطْلَعْ شَهْيل اليَمَنْ ٣٤ فإنْ تَظَلُّ لازماً للمجرَى 13 [وإسمها يا صاح مِيْقَامَارُوسْ ه؛ وحولَها جزائر عثيره 13 لا كَبِّرَ اللَّهُ لَهُنَّ آسْمَا ٤٧ أَوْ كُنْتَ مِنْ جَامِسْ فُلَهُ مُجْنِبَا ٤٨ ومُطْلَعُ الجوزاءِ مجرى لأمرِي ٤٩ أمَّا بطينُ يا أخى شُمُظْرَه ٥٠ مُشَرِّقَة لِنَحْو بَرُّ المُلِّ ١٥ وكم ترى في الغرب والجنوب ١٥ وكُمْ ترى في الغربُ ثُمَّ الشَّرْقِ ٣٥ لكننى ذَكَرْتُ ما قدْ شُهرًا **54 [مطالق الجزر]**

٤٥ أمَّا مَطَالِقٌ يا أخي الجزايرْ هه ومنْ كَرِيْمُوا إِنَّ تَكُنْ مُشَرِّقًا ٥٦ وفي كَريْمُوا الفَرْقَدَانِ آصْبَعَانْ ٧٥ ومثلُها سُنْدَه وفي بَيَانِ

وبينها طُرْقُ تُرَيْلُ الغَمْ وجَاهُ إِصْبَعْ ثُمَّ نِصُّفٍ فَٱتْبَعَهُ لِللهِ يَا سَكَنْ لِخَدِدُ جَامِسْ فُلَةٍ يَا سَكَنْ لَمْ تَلْقَ شَيْئاً قَطُّ إِلَّا الجُزْرَا مَارُوسٌ طَوْدٌ في شُمُطْرَهُ مَانُوسٌ ٢٠ فَهِوُّلاءِ آسْمُهُمُ الكبيرَه ولا رمى فيهم صديقاً مُسْلِمًا لِمَهْكُفَنْج فإليكَ العَقْرَبَا أَيضاً ويرُّها شُمُطُرَهُ * فأَدْر كشيرة أرقاقة منضره أعني السِّيامَ فأخْتَبِرْ يا خِلِّي عنها منَ الْأَوْساخِ يا حبيبي عنْ جَاوَةٍ مِنْ وَسَخِ ورقِّ عَـرُفْتُ أَسْمِاءَهُ والبِجُـرُوا

خُدُ وَصْفَهَا منِّي والامايـر* الى بَيَانٍ ۚ فِي النَّرُيَّا أَطْلِقَا ۗ أَيضاً ونصْفُ كُنَّ فِي الحسبانُ • أَرْسَعَةً ونصفُ للرُسُان

(٥٤) * ت : تكتثر بالاماير ، البديل من ب ،

(٥٥) ، ت: بنات . البديل من ب ، ظ .

(٥٠) ♦ ب، ظ: التحوس.

⁽٤٣) * ت : تصل . البديل من ب ، ظ .

⁽٤٤) * زيادة من ب، ظ.

⁽٥٤) * ت : حاراير . ب ، ظ : خراثيه

⁽٤٨) ه ب، ظ: فمطلع،

^{*} ت : الى برارع وشمطره ، البديل من ب ،

^{**} ب، ظ: المطلق. (٥٦) * ب، ظ: الخشبان.

وأَجْرِ على السَّماكِ إذْ ما تُجْرِي ويَرْنِي البارَ بللا شُكُوكِ إِنْ عَلِيهِا الجاهَ نَصْفُ أَرْبَعَهِ جاهُ ثَلَاثَهُ ثُمُّ نِصْفِ ٱسْتَوَى جاهُ أَصْبَعَيْنُ ونِصْفِ لا تُكابِرُ٠ خُذْ وَصْفَ مَنْ مِيَّاهَا ونَعْتَه على كَريْمَا بالجَزَايرُ فَأَهْتَـدِ الى فلِيْنِيْكَ مَجْرى مَفْشِي خَمْساً ويَعْضُ قال : نَصْفُ زائلُ والبارُ قيلَ مَـطْلَقُ مَشْهُورُ فَرْقَدْ ثلاثِ ثم نِصْفِ قاسوا الله وفي مغيب الأصل سُنْلَهُ باري والقلب والإكليل والشُّعْرَاءِ أَمَّا سُهَيْلُ فعلى ** تَيْمُـوْرَا على مجزاير باندَنْ قليلْ قصدي التّرفّا إنّها مَغْفُولَهُ جــزايـراً لَمْ تُعْتَــرَف كثيرَه ٥٠ ومن كَريمُوا للاؤدي تُسْري ٥٠ ٥٩ ثُمَّ آفْصُدِ الواقِمْ الى مُلُوكِ ٦٠ واجْر في النَّاقَةُ لِصَوْلَكُ ودَعَه ١٦ ومَطْلَعُ النَّعْشُ لِجَزِيْسَوَّةً لِيْبَوَا ۗ ٦٢ ومَـطُلَعُ الفَرْقَـدُ الى مَقَـاسِرِ ٦٣ أَمَّا سُهَيْلِيْها فَرَاقِدْ سَتَّه ٦٤ الجاهُ زَيْتُونٌ وغَـرْبُ الفَرْقَـدِ ٥٥ ومنْ كَرِيْمُوا في مغيبِ النَّعْشِ
 ١٦ ومنْ فَلِيْتيك تُرى الفَرَاقِـدُ ٦٧ وإجْر في النَّاقَة لِسَنْجَافُورْ ٦٨ لِنَحُو جينا يا أخي وفرسـو٠ ٦٩ وإجر في الوَاقِعْ لمُوسَى باري ٧٠ ومنْ كريمُوا آجْر في الجَوزاءِ ٧١ في غربهم لجاوة الشهيرَه ٩ ٧٢ وقيل للمَطْلَع والسهيلُ ٧٣ ذَكَرْتُ ذي المطالقَ المجهولَه ٧٤ وكُمْ ترى شرقيُّ ذي الجزيرَه

⁽۱۸) ♦ ب، ظ: ترفاسوا.

[🐠] ب، ظ: فاستوى .

⁽V1) ه ب، ظ: اشتهرا.

عه ت: مال ، تصویب ب ، ظ.

⁽٧٢) ♦ ت : في البديل من ب ، ظ . فاندر.

⁽٧٤) ♦ ب، ظ: ورا.

⁽۵۸) * ت : لواداد ، البديل من ب ، ظ .

[🕶] ب، ظ: امتری.

⁽٦٠) * ب، ظ: يصفر.

⁽٦١) * ب، ظ: ليبوي.

⁽٦٢) * ت: تكاثر، البديل من ب، ظ. (٦٤) * ت : الجزائر ، التصويب من ب ، ظ .

⁽٦٦) * ب، ظ: خمسة اصابع ثم.

55 [دير دورة سيلان]

٥٧ ودورة السيلانِ عِنْدَ النَّاسِ
٧٦ [ومِنْ مُراشي إِنْ تُرِدْ قَلَرْ مَلِي
٧٧ ومِنْ هناك آجْرِ الى شَلاَوَمِ
٧٨ وبَدَّل ِ المجرى الى* دَنُّورا
٧٩ في مَطْلَع ِ الجوزا ومِنْ دَنُّورا
٨٠ وإِنْ تَسِرْ مِنْ تَيْكُل لَايطما*
٨٠ وانْ تَسِرْ مِنْ تَيْكُل لَايطما*

في القلبِ للشَّلَمْ مِنْ مُراشي في قُطُبِ السَّهيلِ قَدْ حُقْقَ لي]* على سُهيلِ [والى]* مكاتم ** من حدَّ مكَّاتِمْ ** وكُنْ جَسووا لِتَيْكُلُ الطائرُ في المَسيو فَسِرْ على النَّجْمِ السَّعِيدِ تَغْنَما منْ أَيْظُمُ الرامِحْ لِرَامَنْ كُونَة منْ أَيْظُمُ الرامِحْ لِرَامَنْ كُونَة

56 [دير جزر الفال والذيبة]

٨٠ وديرة الفال وجُزْر الفال ٢٨ [الى مَحَلُ ذا المحلُ العالي ٨٤ ومن محلُ في السَّهَيْل المَسْرى ٨٥ والبعضُ قالوا الفالُ للسهيل ٨٨ أمّا شَمَالِيْب عليه الجاهُ ٨٨ والسَّطُر الأولُ جاهُ اربَعَه ٨٨ والسَّطُر الأولُ جاهُ اربَعَه ٨٨ والسَّاطِئ أَرْبَعَةً إحكامًا

في القُطْبِ اجْو بها ولا تُبالِ لاَحر سُلطانِهُمُ والـوالي لاَحر سُلطانِهُمُ والـوالي مِنْ راسه الى أقاصي الذيل على جَنُويهِ محلً الجُهَلا خَمس صحيحة مابه إشباهُ ورُبْع إصْبَعْ خُذْ حديثي وآسَمَعَ ومنه للمُل أثنا عَشْر زاما

ن ب ظ . • • ب ، ظ: تكاممي .

⁽A°) ♦ ب ، ظ : وان شرقي تيكل لا يضمنا .

⁽٨١) ب، ظ: انظم.

⁽٨٥) * ب، ظ: من الراس الى اقصى .

⁽٧٥) • ت : الى الشام ، التصويب من ب ظ .

⁽٧٦) ♦ زيادة من ب، ظ.

⁽٧٧) * زيادة من ب، ظ.

ب، ظ: تيكاممي، ت: الأكاتم.

⁽٧٨) ♦ ت: من، البديل من ب، ظ.

أربَعَةُ أزوام عِنْدَ الخابر]* وأنْلَرُوه وآكْتى تَبغنا المَشْرقا لساحِل المَغْرِبُ سُهَيْلٌ في الغُزْرِ بينهُمُ طُرِقُ لذى البصيرة أُتْسرُكْهُمُ إِنْ جُزْنَهُمْ يَسارا قاصد برّ الهند لا تُسازع ٢٠ وبَعْدَ كَفِّيني ومَلْكي خَبُّرُوا وكَسُوْرَدِيْبُ ۚ بَعْدَ الْمَيْنِي تَسَلا توري خَرابُ بَعْدَهُمْ خُنْدُ نَعْتى في مَفْرِبِ السَّهَيْلِ واقِعانِ خَمْسَ فراسِخْ صِرْنَ للخَوَاصِ عَنْ كُوْرَدِيبِ للغربِ ياخليلا أَرْبَعُ أَصَابِعُ جُرِّبَتُ يَا أَمَلَى الحِياةُ ذُبَّانًا فيلا تُسَدِّلا ثلاثةً ونصفُ لي قد خَبُروا كأنسدرُوا باأيها الأديبُ أيضاً وكفّيني على التّحريــر باصبعين ونصف جربوها أزُّوامُ عَشْر وثمانِ فأسأل] ** جزيرةُ لارْديب تَقْدُن منها

٩٠ وبينَ كلُّ مُسطُّر والآخير ٩١ [ديرَتُهُمْ قُطْبُ السُّهَيْلِ حُقَّقاً ٩٢ بَلْ إِنَّ مَلْكي يا أخي عَن السَّطْر ٩٢ أعدادُها آثُنتا عَشُرْ جزيرَة ٩٤ وَلَمْ تَسْزَلُ جِمِيعُهُمْ عَمَازَا ٩٥ إنَّ كانَ مجراك ففي المطالع ٩٦ [والساحليُّ كلَّتي وأنسدَروا ٩٧ ويَعْدَ شُتْلاكُمْ وكَنْجَمَنْجَـلا ٩٨ وشِعْبُها البَحْرِيْ وجُزْرُ أَكْتَى ٩٩ لهـا وكَنْجَمَنْجَـلا شعْـان ١٠٠ لكنَّ ذا شعبٌ كبيرٌ قاصى ١٠١ وف إتيه مُنْحَرِفٌ قليلا ١٠٢ والجاه بين البُّتْر والفرمَلي ١٠٣ وبينَ شَتْ الأكُمْ وكَنْجَمَنْجَ الا ١٠٤ وثم كلُّتى آرْبَعَـه وأنْـدرُوا ١٠٥ وَأَكُنِّي ، بَنْجَــازَمُ ، كُـوْرديبُ ١٠٦ وقس [ثلاثاً] إنْ تردْ نوري ١٠٧ أمًّا جزيرة مُلَكِي قاسوها ١٠٨ لها مسافةً منْ بَرِّ كُوْلَمِ التميلِ * ١٠٩ وإنْ تُكُنْ تُلْزَمْ سُهَيْلًا منها ا

(٩٠) ، زيادة من ب، ظ.

(٩٥) ، زيادة من ب، ظ.

^{* ﴿} زيادة من ب، ظ.

⁽١٠٩) * الاصول عنها ، ** ب ، ظ : لاشك

بلاريب.

⁽١٠٨) ♦ لا يستقيم وزن البيت. إلا إذا قلنا مثلاً: من برها لكولم التميل.

ثلاثُ عَشْرَهُ قَطْعَةً فَأَنْتِهِي * ١١٠والجاهُ فيها نِصْفُ ذُبَّانِ وهي فالقلبُ مجرى كلِّ ذي نِهاءِ ١١١ فَمَنْ يُردُ منها الى كيالاءِ جاهُ أَصْبَعِ خُذْ تحريرَه ١١٢ وهِي جزيرَهُ باأخي كبيرَه مَطْلَعه للغَرب بالدليل ١١٣ منها الى محل في السَّهَيْلِ السَّهَيْلِ اللَّهَيْلِ اللَّهَيْلِ اللَّهَيْلِ اللَّهَيْلِ اللَّهَيْلِ اللَّهَيْكِ اللَّهُ اللْلِهُ اللَّلِم أيضاً وُجبتي مَنْ تُردُ عن ذا [فَسَلْ] * ١١٥ أيضاً وشيعٌ دِيبٌ وكارَديبُ الجاه نصف آصبع لا يغيب أمَّا بجُبْتِي نصفُهُ فأسْمَعوا ا ١١٦ كَنْدِيْكُلُ الجاهُ عليها إصبَعُ نُظِّمَ في الكترةِ عن مالوسي. ١١٧ في البحر عنها أقليمُ كَنْدَلوس والفرقدان سبغة بالسواء ١١٨ وفي محلِّ الجاهُ واسي° الماء ١١٩ وإنَّ طَلَقْتَ منْ مَحَلُّ ساري وأنت في مَطْلَعْ سُهَيْل جاري قَبْلَ سُوَيْدُوْ فآستَمِعْ مقالتي ١٢٠ تلقى ملوكَ يافتى وهَـدْمَتِي عشرونَ زاماً جاء في التُقْدير ۱۲۱ وبینها وبین تَیْسرَمْ تــوری الى سُوَيْدو فأَسْتَفِد مِنْ كلمتى ١٢٢ وإنْ تَكُنْ طالقَ مِنْ هَدْمَتِي وهَـدْمَتي بلا شكـوكِ خَمْسَه ١٢٣ والفرقدانِ في ملوكِ ستب ١٢٤ إجْرِ لها في مطلع السَّهِيْلِ فراقد أرْبَعَه ونصف قولى • بمطلع العَقْرَبُ بالا شُكوكِ٠ ١٢٥ ومنْ سُدويْدو لِفُلو مُلُوكِ في مُطْلَع ِ السُّهيل بالإيضاح ١٢٦ ومن سُويْدو لأِدُو يا صاح آخر كلِّ الجُزْر عاربُاني ١٢٧ جـزائـرُ عِـدُتُـها ثمـان

(۱۱۰) ، ب نظ: فانتهى . ت : مسه .

⁽١١٤) • ت: اسقاط، ب، ظ: اسال.

⁽١١٦) • ت : قاستمع ، ب : قاسمع ، ظ : قاسمعوا .

⁽۱۱۷) • ت: بالوس، ب، ظ: مالوس. والكترة، وسط الشيء.

⁽۱۱۸) ، ب، ظ: سوی .

⁽۱۲۱) • ت: بر منوری ، ب ، ظ: تیرم تهری .

توری . (۱۲۶) ه ب ، ظ : هی فراقد . . قبیلاً .

⁽١٢٥) * ب، ظ: في السلوك.

 ⁽۱۲۱) • ب، ظ: ومن ولادا ان تسر.
 (۱۲۷) • ب، ظ: هم آخر.

۱۹۲۷) **۵** ب ، ط : هم احر .

^{☀ ☀} ب، ظ: العمار.

57 [مطالق بر القمر]

أمًا الخراباتُ فَهِي كُتيرَهُ فلا تُجاوِدُ إِذْ تَصِلُ اليها للظلماتِ كلَّها تسمَّى وماثلاتُ للشرق هاكَ الخَبرُ سوى خروص أكثر في صفحتك عن آخرِ الفال لنستريحا مُخْتَصَراً كي لايقال أُمَّيُ

وقصْدُكَ المَمْبَرُ نَحْوَ الجُزْدِ
مِنْ صَوْبِ سَعْدَهْ قال لي مُحَدَّثي
في مطلع السُّهيل ياخليلي
نيري رَجا تاتيك لا تُمادِ
أيضاً تراها ياكثير الأدبِ
من نَحو بنُندٌ كوسَ لا تُكابِر
وتلك مِنْ بنُندٍ أبيه تُرْتَجي
من المطالع فافهَمَنْ شعري
كنا ذَكُرنا فيعف ذي العيَّرق

(١٣٤) * ت : كي يقال امي ، ب ، ظ : كي

لايقال ارمى .

(۱۳۸) * ب، ظ: الميكار.

(۱۲۹) ، ب، ظ: تجيها.

⁽۱۲۸) 🛎 ظ : معمورة جزيرة .

⁽١٢٩) ، بن ظ: الا الفرقدين.

⁽۱۳۲) ، جميع النسخ : بربر .

جميع النسخ: حروص.

^{• • •} جميع النسخ : صفوحتك ٍ

⁽١٣٣) • ت : الفال يا أخي صحيحاً . البديل من ب عظ .

⁽۱٤٠) ♦ ت: نسر. البنيل من ب،ظ. (۱٤۱) ♦ ت: اته. البنيل من ب،ظ.

58 [مطالق بر بربره]

ه ١٤٥ أمًّا مَطَالِقُ بَرْبَرَهُ للعَرَب ١٤٦ منْ مَيْطَ للبابِ على التُّريَّا ١٤٧ أمَّا عَدَنْ في النَّسْرِ والعصيدَة ١٤٨ في القُطْبِ وَالشُّحْرُ عَليها الفرقَدْ ١٤٩ ومطلعُ النَّعشُ عليه فَرْتَكُ ١٥١ ومَنْ سرى من رأس جَرْدَفونِ ١٥١ والقطبُ فَرْتَكُ والبُرُومُ النَّعَشُّ ١٥٢ أمَّا عَدَنْ في التِّيرِ والسَّماكِ ١٥٣ والبابُ مجراهُ مغيبُ النَّجْم ١٥٤ ومنْ سُهَيْليُّ سُقطْرَهُ تمشى ١٥٥ وفرتكِ النَّاقة، أمَّا الشُّحْرُ ١٥٦ ودارً زَيْنَه فالثُّريَّا تُرْشِدُ ١٥٧ واجْرِ في الجوزا لِعَبْدِ الكورى ١٥٨ وفي مغيب يا أخي الإكليل ١٥٩ والقطبُ حافوني تراكَ تاتيَه ١٦٠ وكلَّ رُبَّانِ جـرى منْ مامى ١٦١ وفي مغيبِ النَّعْشِ تاتي حَيرِجَا ١٦٢ والشُّحُرُ فَي النُّجْمَ وَدَارُ زَّيْنَهُ

ذَكَرْتُ ماجَرَّبتُ للمُجَرَّب والعارة السُّماكُ بِا أُخَيًّا عصيدة الحضارم الرشيده إِسْهَرْ وَلِا تَرْقُدُ كَمَنْ قَدْ رَقَدُ وخُورِيا العَيُّـوقُ لاتُشَكِّكُ في النَّعش صابَ الجُزْرَ باليقين والجُزْرُ مجرى البار ليس غِش مجرى الى العارّة يا ذا الزاكي أعنى الشُريًا إِفْهَمَنْ نَظْمى لحاسكَ القُطْبَ وظَفار النعش. في النُّسْرِ والرَّامحُ تأتي الجُزْرُ والفيلُكُ الهيرانُ قد تأكّدوا وجَـرْدَفـونُ النِّيـرُ بـالتَّقْــريـر. تَحُويكَ بَنَّهُ خُذِ بِالدَّليل وإسم ما الراس هُوْ قَلْنْسِيَه في القُطْب يلقى الجُزْرَ بالإقدام وفي مغيب البار فَرْتَكُ تُرْتَجي خُد المفيت تراها بيُّنه •

⁽١٤٥) • ب، ظ: ير،

⁽١٤٦) • ب، ظ: در العارة.

⁽١٤٧) * ب ، ظ : الحميدة حصيدة .

⁽١٤٩) ﴿ طَ: الناقة .

⁽۱۵۰) * ظ: صاحب، ت: صار.

⁽۱۵۲) 🕶 ب ، ظ : النجم .

⁽١٥٣) # ب، ظ: عن.

⁽١٥٤) ♦ لا يستقيم وزن البيت ولا القافية .

⁽١٥٦) ، س، ظ: راشدا.

⁽١٥٧) ♦ ث: التقريب، التصويب من

⁽١٥٩) * ظ: القلب.

^{• •} ب، ظ: من اسم.

⁽١٦٢) * ب ، ظ : سر في المغيب برها مبيته .

١٦٣ من فَرْتَكَ القطبُ عليه آجُروا ١٦٤ ومَيْطُ في العقربِ أمَّا الرَّامِحُ ١٦٥ وإنْ تَكُنْ طالِقَ مِنْ جُزْرِ قَنا ١٦٥ وللهُ حَرْرُ قَنا ١٦٥ وللهُ حَرْرُ قَنا ١٦٥ وللهُ حَرْرُ وَ أَسَمُ عَيْم لَرَاتِ ١٦٥ ومَعَلَم الجوزَاء منْ مِصْرِ اليَمَنْ ١٦٨ ومَعَلَم الجوزَاء منْ مِصْرِ اليَمَنْ ١٢٨ والتَّيرُ عبد الكوري الدليلُ ١٧٩ ومقلعُ القلبِ جبالُ الكُمْلِ ١٧١ وبَرْرَبَرَ في القطبُ ثمَّ الزَّيلَةُ ١٧٧ وبعدُ في أثناء ذي المطالقِ ١٧٧ حسة من الأزوام عَنْ مَيطً آغُرُرا عدلًا حدالًا على ١٧٤ وكلً مَنْ يَعْرِفُ حسابَ هذا

59 [مطالق بر الجمجمة]

١٧٥ وإِنْ تَكُنْ طَالِقَ بِرِّ الجُمْجُمَهُ ١٧٦ إِنْ تَجْرِ فِي النَّاقَةِ للكرازي، ١٧٧ ومطلعُ المَيْرُقُ لطاح طاحْ

لِجُرْدَفُونَ والسُّهْبَلُ آهْجروا لِمَخْرِبِ الإكليل لِي قد شرحوا أَنْ فَيْرِ عَنا فِي القَطْبِ تَأْخُذُ مَيْطَ مِنْ غَيْرِ عَنا فِي مَغْرِبِ المُحْنِثِ أَنتَ تاتي أَنْ مَنْ فَيْ مَغْلِ المُحْنِثِ أَنتَ تاتي أَنْ مَنْطُرَهُ وَسُهَيَّلُها عَلَنْ وَهِي مَغْلِ الْعَلْمِ أَنْ الْعَلْمُ تَنْظُرُهُ وَسُهَيَّلُها عَلَنْ وَهُو الظليم يَعْلَى وَطُودُ مَيْطً فِي الظليم يُعْلَى وَطُودُ مَنْطً فِي الظليم يُعْلَى فِي مغربِ السُّهيَّلِ لَكَ يَرْتَفْعُ فِي معربِ السُّهيَّلِ لَكَ يَرْتَفْعُ فِي معربِ للحاذقِ في مقللم السَّماكِ تَأْخُذُ مِنْورا في مَعْلَى السَّماكِ تَأْخُذُ مِنْورا في معرب للحاذق في عَلْمَلُم السَّماكِ تَأْخُذُ مِنْورا يكونَ وهوَ الكاملُ الأستاذا ويكونُ وهوَ الكاملُ الأستاذا ويكونُ وهوَ الكاملُ الأستاذا ويكونَ وهوَ الكاملُ الأستاذا ويكونَ وهوَ الكاملُ المُستاذا ويكونَ وهوَ الكاملُ السُّمِيلِ السَّمِيلِ السَّمِيلُ السَّمِيلِ السَمِيلِ السَّمِيلِ السَّمِيلِ السَّمِيلِ السَّمِيلِ السَّمِيلِ السَ

لرِّ مكرانٍ إليك المَصْلَحه القطبَ تُتَنَعُ نَتَعُ مجرى جائز "" وفي السِّماكِ بَسْنَي يا صباحْ

⁽١٦٤) * ب، ظ: المعقل.

^{• •} ب، ظ: شارح.

⁽١٦٦) * ت : وللمكورات وعيدرات .

^{☀ ☀} ب، ظ: ان تأتي

⁽١٦٧) ، ب، ظ: المنيب.

^{• •} ب، ظ: تبسر. دمتریم الایتی

⁽۱٦۸) ♦ ب، ظ: تری سهیلي سقطره قد علن .

⁽۱۷۱) ♦ ب، ظ: القلب.

⁽١٧٢) • ب، ظ: المطالم.

⁽١٧٤) ♦ ب ، ظ : يكن هو الاكمل الاستاذا .

⁽۱۷۰) • ب، ظ: تكون .

⁽١٧٦) ، ب ، ظ: للمكرازي .

^{● ♦} ب، تا∷نيە.

^{***} جميع النسخ : جاري .

١٧٨ أمّا الشُّرِيَّا فَهِيَ للدَّيُولِ المَّارِقِ المُّدِولِ المَّارِقَ الْحَاسِ واتحا المَّورِقُ المَّارِقِ المُقْرَبُ المَّرِقِ المَقْرَبُ المَّدَوقِي مغيب يا أخي المقْرَبُ المَدَرِقِي المَقْرِبُ المَّدَرِقِ المَقْرَبُ المَّدَوقِي المَقْرَبُ المَّدَوقِي المَقْرَبُ المَّدَوقِي المَقْرَبُ المَّدَوقِي المَّمَالُ المَّالِقِيقِ المَّمَالِينِ يَقُولُ المَّدَدِينِ يَقُولُ المَّدِينِ المُصل بالسواءِ المَّالِينِ المُصل بالسواءِ المُسلواءِ المُسلولةِ المُسلواءِ المُسلواءِ المُسلواءِ المُسلواءِ المُسلواءِ المُسلولةِ الم

إِعْمَلُ بِذَا وَآجُو بِلا فَضُولُهِ لِلْيَمَّةِ خُذِ السَّماكُ الرابِحا خُدِ المغيبَ تَلْتِقِ الصلاحَا الى عَرَابَهُ مَـطْلَقُ مُجَرَّبُ والسَّلِبَارُ الجُسْزُرُ بالتحقيقِ أيضاً وقَلْهاتٌ بِذَا الدَّلِيلُ إِسْمَعْ كلامي وآفْهَمَنْ تُرْشَدْ** وآحْسُ سواها عِنْدَ جَرْي الماء

⁽۱۸۰) ﴿ بِ، ظ: خَذَ الْمَغَيْبِ تَلْقَى الصلاحا.

⁽١٨٤) ♦ ب، ظ: يقول . ♦ ♦ ب، ظ: افهمن الرشد.

الفصل الثامن

في معرفة المسافات من بر العرب إلى بر الهند ، من جاه خمس إلى جاه اثنتي عشرة ، [وذكر المسافات]** على أربعة رؤوس ، وذكر أزوامهم ، وما يتعلق بذلك ، وهم قيد [يعتلم بهم] ٥٠٠ مسافات جميع البحر . والله أعلم بالصواب.

60 [المسافات بين بر العرب وبر الهند من جاه احدى عشرة الى جاه خمس] كذاك قد حُقُّ حسابٌ رشدى خمسونَ مَعْ وَامين في ذا الوصفِ⁴⁰ ثمانِ مع ستين ياذي البَركه فهى ثمانونَ فلا تُماريَا

١ أمَّا المَسَافَة بينَ برَّ الهندِ * وبينَ برُّ العُرْب * فهيَ عندي ٢ وعنـــذ كلِّ الخَلْق أربعينــا بينَ زَجَدُ والحَدُّ يـا فـطينـا ٣ أيضاً وبينَ مَسْقَطٍ والسُّنـــــ ٤ وبينَ راسِ مِــدُورِ وخَـلُفِ ه وبينَ دَهْراوي وبينَ مَدْرَكَه ١ وبينَ راس سَوْقِرَهُ ويُورِيَا

⁽١٣) ٥٠ ت : هكذا قدا ، ب ظ : كذا قد احق .

⁽٤) ♦ ب، ظ: قي .

و و بي ظار الصف .

⁽١) * ظ: فهي ثمان خلولا.

ب، ظ: الحسابات.

^{♦ ♦} زيادة من ب ظ.

⁽١) * ب: العرب.

[.] الهند .

⁽٢) * ظ: من .

٧ ودُنْدَباشي بينها وسَاجــر ٨ وبينَ أَزْدِيْفَ وَبَيْنَ الشُّحْـر ٩ أُمِّا المسافة بينَ مَنْجَلُور ١٠ مـاثةُ زام مَعْ ثلاثينَ على ١١ وبينَ دارِ زَيْنَةٍ ومامى ١٢ سَبِعَةُ أَزُوامٍ تزيدُ نصفًا ١٢ وبينَ راسِ الفالْ ومَلْبَاراتُ ۱۶ وبینه وبین راس مامی ١٥ وقالَ بعضٌ هُنَّ سِتُّونَ عَلَدٌ ١٦ وكلُّما أَجْنَبْتُ زادَ فيها ١٧ في كل إصْبَعْ أيُّها الرُّبَّانُ

تسعونَ مَعْ زامينَ عِنْدَ الخابرِ * ماثة تزيد ثمان ونصف فآدر ** وطَـوْدِ دارِ زَيْنَةَ المشهـور حسابنًا هذا الذي قد كُمُلا منها على هذا الحساب النامي ٥٠ فوق الثلاثين فهاك الوصفًا عشرون زاماً ما بها شُبْهَاتُ سبعونَ مَعْ زامين خُذْ كلامي والتِّيرُ والواقعُ لدى الحِسْبَةُ سَنَدُ ثمانية أزوام يا وجيها على الحسابين لَكَ الأمانُ

> 61 [المسافات بين بر النات وبر السيام] ١٨ وديـرةُ السِّيَامِ يـا مُسْتَخْبِـرُ ١٩ [لأخر السيام هاك وصفي ٢٠ أيضاً وير النَّاتِ في السُّهَيْلِ ٢١ عشرونَ زاماً بينَهُمْ وزائِــنَهُ ٢٢ ما بينَ شاتى جامَ وكَنْفَارَا

يجري على السهيل فيها المُغْزِرُ الى فراقد خسةٍ ونصفٍ]* مغيبهِ فافْهَمْ لذا التّأويل زامان فَآحْسِبُها بهذي القاعدَهُ كَرُّرْتُ لَكُ في نَظْمها مِرَارا

⁽٧) * ظ: مع ستة كذا المخابر.

ب : مع ستة عند الخابر ، وفي

الحاشية : والأصح انها اثنان وتسعون زاماً . (٨) * ت: ازديف، ب، ظ: ازاديو.

عش س، ظ: ماثة واربع عشر يا ذخر.

⁽٩) ه ب، ظ: وخلود.

⁽١١) ♦ ب، ظ: الى .

ت: الثاني، التصويب من ب، ظ. (١٥) * ت: بعضهن، تصويب ب، ظ.

⁽١٨) * ت : المغرب، البديل من ب، ظ. (١٩) ، زيادة من ب، ظ.

⁽٢١) * ت : وزائدة فاحسبها لها ، التصويب من ب، ظ،

١٠٠ كنتَ يوما مَجنبا فَكُلُما
 ٢٤ أَنَّ مَسَافَتْكَ تزيدٌ أَزُوامًا
 ٢٥ ما بينَ برَّ المَطْلَعِ والنَّاتِ
 ٢٦ ويينَ جامِسْ فُلْهُ والدَّيِّيَه ٢٠
 ٢٧ وغيرُ هذا في الحساب يأتي

يُنْقُصُ عَنْكَ الجاهُ إِصْبُعْ فَاعْلَمَا أَصِدَادُهَا ثَمَسَانِيسَهُ تصامَسا تُضَافُ فوقَ الأَصْلِ بالنُبَاتِ مايةً زام ثابتَهُ *** مُصِيْبَسه لكنَّ هذا أَثْبَتُ الحساباتِ*

26 [المسافات على رؤوس جاه احدى عشرة]

٨٧ وبعد هذا إنني آختصرت
٢٩ في جاه أَحَدْ عَشْرَهُ وَحَمْس وَآصَيْعُ
٣٠ إِذْ هذهِ الروسُ عليها المُمْتَمَدُ
٢٣ وبينَ راسْ دَوَائسِر والقَحَازُ
٣٣ وبينَ راسْ الحدَّ أيضاً وزَجَدُ
٣٣ وبينَ كَتْبايَةُ وهذا الراس
٣٥ وبينَ كَتْبايَةُ وهذا الراس
٣٧ مَايْتَانِ مَعْ تسعينَ زاماً صافيَه
٣٧ مَايْتَانِ مَعْ تسعينَ زاماً صافيَه
٨٣ أَمَا قياسُ الصَّين ثَمَّ المَعْربِ
٨٣ أَمَا قياسُ الصَّين ثَمَّ المَعْربِ
٨٣ والقَمْرُ أَيضاً قطً ما توافقًا
٢٥ والقَمْرُ أيضاً قطً ما توافقًا
٢٥ والقَمْرُ أيضاً قطً ما توافقًا

مسافة في الحاوية نظمتُ وَوَرُقَدِ إِصْبَعْ ، إليكَ فاسْمَعْ عند جميع الخَلْقِ مِنْ أَهُلِ الرَّصَدَ إِنْ الْمُصَدَّ عَشَرْ بالمولم الرزَّالْ خَمْسَهُ وتسعونَ لراسِ الحدَّ أَرُوامُ يا بِحِيْ أَربعونَ بالمَدَدُ عشرونَ زاماً لا تَكُنْ بناسي عشرونَ زاماً لا تَكُنْ بناسي خَمْسَهُ وعشرون مِن الأزوامِ وينَ شاتي جام كُنْ مُلْتَغِنَا وينَ هافيَله وينَه شاتي جام كُنْ مُلْتَغِنا وينَه في أروامها وعشها في أروامها وحقها

⁽٢٦) * ب، ظ: مايين.

ن إلليه، تصويب ب، ظ.
 ب، ظ: ثانياً.

⁽۲۷) ، ب، ظ: للحساب.

⁽٣١) • ت: الزرزاري، ب، ظ: الدرار.

⁽٣٤) ♦ ت : ويين ، البليل من ب ، ظ .

عثرون زاماً لاتكن بناسي، ب،
 غا: عشرون باذا لاتكن بناسي.

⁽٣٦) ♦ ب: وبيتا . (٣٩) ♦ ت: والقمر ايضاً ما اتفقا ، ب ، ظ:

والقمر ايضا ما توافق .

63 [المسافات على رؤوس جاه خمس]

أمّا تواهي بينها والجُرْدِ اللهُ وَثَلْتُونَ ومن صَدْرافَتَنْ
 إثنان وثَلْتُونَ ومن صَدْرافَتَنِ في البَرِ اللهِ أَدُوامُ قَدْ قالوا ثلاثونَ فَلا عَدْرَ بينَها والفال
 ومَنْجَلُورٌ بينَها والفال
 أمّا مِنَ الفال لراس مامي

٤٦ ومنْ سُفَطْرَهُ في حسابُ الدَّيْرَه
 ٤٧ سبعونَ (امآ وحسابُ ثاني

١٠ عبون ربط وحسب ماي ٨ وبرر جُمْلَهُ وذبابٌ بينها

٤٩ وبينَ جاوِ خَمْسَةٍ تــواهي

٥٠ مايْتَانِ مَعْ ستَّينَ جاءَتْ في العَدَدْ

65 [المسافات على رؤوس جاه اصبع] ١٥ أُمَّا مِنَ السَّيفِ الى كَنْدِيْكُلِ ٢٥ خَمْسُهُ وتسعونَ * هِيَ المَسَافَة

٣٥ وبينَ كَنْديكِلْ وَسَـرْنَدِيبِ
 ١٤٥ إثْنَا عَشَوْ زاماً حكاها مَنْ جَرَى

أعني بجاهِ إصْبَع يـا أَمْلِي أَرُوامَ خُدُ هذا وَتَخْ خِلاَفَه عشرونَ زاماً زِدْتَ يـا أَديبي٠ والبعضُ قالَ غيرَ ذا وحرَّرًا٣٠

أعنى بـأَنْدَمَنْـدِ جُـزْرِ البِحْـرِ

لِلْجُزُرِ اثْنَانِ وَخُسُونَ مُؤْتَمَنْ *

وبينَ مُنْجلورَ هِيْ ياعَمْرِي. تكونَ في شكُّ ولامُفْتَشِلَا

عشرونَ زاماً جَعَـلَ الأوالي•

سبعونَ مَعْ زامينِ خُذْ كلامي الى ذُبَابِ مَعْ ذوي البصيرَه

يَحُكُمُ بِهَاأَتُلُ رُبُانِ

ئمانِيَة أزوام إفهَمْ شرحَهَا وبينَ بَرِّ جَمْلَةَ آعني ها هي

وفوقها أَرْبَعَةُ لِهَا مَلِدُ"

(٤٠) ، ب نظ: وبينها وبين الجزر.

(٤١) ، ت : مدار فمين ، تصويب ب ، ظ .

عه ت : وخسین حساب الموتمن ب ، ظ : مع

خسین صدقاً موقمن . (٤٢) * ت : تعمری ، التصویب من ب ، ظ .

(٤٢) * ت : نعمري ، التصويب من (٤٤) * ب ، ظ : جعلوا وآل .

(٤٧) ♦ ب، ظ: ستون.

(٥٠) • ت : ستين ازوام عدد ب : ستين عدد ،

البديل من ظ.

🕶 پ، ظ: مبد.

(٥٢) ه ب، ظ: ماية.

(٥٢) • ب، ظ: والسيلان ثبانية مع عشرين زامان .

(٥٤) € ت : ازوام التصويب من ب ، ظ .

🐠 پ، ظ: فاحذرا.

٥٥ لَأَنُّها إقليمُهَا كبيرٌ ٥٦ وبينَ برُّ قَـدْحِ والفِـالِ ٧٥ أُعنى بجامِسْ فُلَهِ أُزوامْ ٥٨ وبينَها وبينَ طوطاجام ٥٩ وبينَ بسرٌّ قَسدْح والسِّيفِ ١٠ لمائشانِ مَعْ ثلاثه عَشَرْه

> 65 [المسافات على رؤوس فراقد اصبع] ٦١ أمَّا مِنَ الجزيرةِ الخضراءِ ٦٢ ماثة وخمسونَ بلا نُقْصانِ ٦٣ منْ كَـرْمَ دِيْوَةِ لجاوَهُ سُنِدُ ۗ ٦٤ وصار مابين الجزيرتين ٢٥ ثَلْتُمايةِ أَزُوام للمهذّب المهذّب المهددة المه

> 66 [استخراج مسافات جميع البحر] ٦٦ جَعَلْتُها مسافةً فأتبع
> ١٧ إذا تَأمَّلُها الخبيرُ العاقِلُ ١٨ شقَّ مسافاتِ جميعِ البَحْر ٦٩ إِذْ لَمْ تَكُنْ مسافةٌ مجهولَه

لها حسابات تری کثیر فَالَ السَّيامِ فَأَعْتَبِرُ مَقَالَي عشرون زاماً بل أَكْثَرُ يا همامُ اِثْنَـانٌ وسبعونَ مِنَ الْأَزْوَامِ السطويسل إفْهُمَنَّ تَكْبِينْفي في ذا الحساب البيِّن المُشْتَهَرْ • و

لِكُرْمَ دِيْوَةُ أَسْتُمِعُ إِنْهَالَي بَلْ هِيْ تزيدُ في حسابِ ثاني مايةً زام مَعْ ثلاثينَ عُدِدْ جاوة والخضراء بالتعيين تَنْقُصُ عشرين بهذا الواجب م

منْ جاهْ أَحَدْ عَشَرْ لِفَرْقَدِ آصْبَعِ ومَنْ له في التَّرْبَنَهُ مَدَاخِـلُ منها وكلُّ يَفْتَقِـرُ ۚ في الْمُمْرِ في جُـزُرِ شَارِدَةٍ قَالِيلَه

⁽٥٧) ، ظ: عشرون بل اكثر، مصحح

⁽٥٨) ♦ ت : ست وستون . والبديل من ب ،

⁽٦٠) • ب، ظ: ثم اربعة وعشرون . ت: مع ثلاثة عشر والجوازات الشاذة واضحة .

ب، ظ: الشتهرون . (٦١) * ب: لكرمدنوا .

⁽٦٣) . الجاه بالسند . التصويب من ب 🐲 ت : عدد ظ : عدوا ، البديل من

⁽٦٥) ● ت: للمهدر، البديل من ب، ظ. * ت: الموحر، البديل من ب، ظ. (١٨) * ت : معتصر ، البليل من ب ، ظ .

⁽٦٩) ، ت : شاذة هنا ، ب ، ظ : ساردة .

الفصل التاسع

في معرفة قياس الجاه والفرقد والنعش عند استقلال الصرفة ، وهو قياس الأصل على جميع الرؤوس المشهورة في سواحل البحر المحيط الواغل في الشهال، وهو بحر الهند، والسيام وبر العرب والسواحل. والله أعلم بالصواب.

أيضاً وفي البُّنجَالتين بالعَدَدُ فجرِّبُوه يا وذي التجريب والدُّيْوُ مَعَ المَحْرَم مَعْ "مصيرَه وتانةً ﴿ أَيضًا ومَدْرَكَهُ مَعَا جُزْرُ سَمَرْ وراسٌ حَمْضَهُ شُهرْ

67 [قياس الجاء من ارتفاع احدى عشرة اصبعاً الى ارتفاع اصبع] ١ أمَّا قياسُ الجاوِ يامهـذَّبَا قياسُهُ الأصْلَى الذي قَدْ جُرِّبَا ٢ إذا آستقلَّ الصَّرفُ فوقَ الراس وإستسوى * فراقــد القياس ٣ جُنَّةُ ثُمَّ الحَدُّ قالوا وزَجَدْ ؛ إحدى عَشَرْ ٱلْجَاه بلا تكذيب رَكَنْجُ مَعْ جِيجَهَرُ المشهورَه ٦ عَشْرٌ ، وفي مُوْمْ وكَنَاركُ ۚ تِسْعَه ٧ مرابطِ الخَيْلِ ، فأمَّا الجُـزُرْ

هذا ,

⁽١) ، ب : قياس البحر مصحح قياس الهند وفي

⁽٥) * ب، ظ: جهنجر.

[•] ب، ظ: مع محرم كذا.

⁽١) * ب، ظ: وقناف.

^{**} ب، ظ: مهايم.

الهامش بحر الهند، ظ: قياس الهند.

 ⁽۲) * ب، ظ: في مستقل الصرفة. واعتدلا، ت: استویا.

⁽٤) • ب: قد جربوه الى ، ظ: قد جربوا

إسمع كلامي تُحْظَ بالصّلاح ومثلُهُمْ وَيْسَا مَع سَتْوَاهِي وَذَنْدَبَاشي سَبْعـة وسَاجـرِ والبعض قالوا إنَّهُ نفيسُ ومَــرْطَبَـانْ ومُتّبَلِى والشُّحــرِ • بهِ كذاك الجاه ستَّه يُـوْفي الجاه خَمْسُ إِفْهَمَنْ وصفى ذُبَاتُ ودارُ زَيْنَةِ ومامى أُوِّلُهُ مِنْ شاطىء الشَّمالِ وأنْدَمَنْدُ ثُمَّ فالي فأتْقِنْ أوَّلُها منَ الشمالِ أَعْنى تَبْدُ سحائِبٌ قُطْبِكَ الجنوبي وتِسرُمَىلا وَاصِسلُ * وأَنْدَرُوَانُ كهؤُلاءِ الـروسِ بَلْ يـوفونــا وناكَ فَتُنْ اللَّهُ باري ثمُّ قَرَايه خدمةً الرُّبَّانِ حتى على التّتخات تلقى العافِية

٨ وصَوْقِرَهُ وبُوْرِيَا ياصاح ٩ الجاهُ ذُبَّانانِ فيهُمْ زاهي ١٠ أُمَّا بِنَجْرِاشِي * مَعَ جُدَاوَدِي ** ١١ والجُزْرُ والحَرْدةُ مَسْعَهُ قِيسُوا ١٢ أَمُّا ۚ أَزَادِيْكَ فَسِنُّهُ فَانْر ١٣ أيضاً ورأسُ الخلّب المعروفِ° ١٤ وإنْ يَكُنْ عندَ اعتدالِ الصَّرْفِ* ١٥ فَهِوْلاءِ الروسُ ياضرغامي ١٦ ومَنْجَلُورُ ثُمَّ راسُ الفالِ ١٦ ومَنْجَلُورُ ثُمَّ راسُ الفالِ ١٦ أَيضًا ويرُّ النَّاتُ وصَدْرافَتَنْ ١٨ وشَهْرِنُوا ثُمَّ جُزْرُ بَرْنِي ١٩ فَإِنْ تُقَابِلُهُنَّ بِاحبيبِي ٢٠ والجاه في تَنَاصَري ذُبَّانْ ٢١ وقدابُفَدات ثمَّ جَدِّدَفُونِدا ۲۲ والمَرُّ ثمَّ شَنْكَلُ . كُنْ داري ٢٢ أيضاً مُرَاشى طَرَفُ السيلانِ ٢٤ وكُشِّي الجاه ثلاثه وافيه

⁽١٩) ، ت : سحاير ، التصويب من ب ، ظ . (٢٠) * ت : واسي ، ب ، ظ : واشي .

⁽۲۱) ، ب: كابكات .

⁽٢٢) * ب، ظ: الريم.

هه ب، ظ: شنكل، ت: مسحل.

^{٭٭٭} ب، ظ: ناك فتى . (۲۲) ، ب، ظ: قرایا، ت: مریا.

⁽۲٤) ، ب، ظ: تيس فيهم، ت: كشي.

ت اللاث مائة ، التصويب من ب ، ظ .

⁽٩) ، ت : ومتهم وسامح ، التصويب من ب ،

⁽۱۰) * ت : نجراشي ، ب ، ظ : بنكراشي .

^{**} ت : حدراوي ، التصويب من ب ، ظ . (١١) * ت: الحرده، ب، ظ: الجزيرة.

⁽١٢) * الحلل في القافية واضح .

⁽١٣) • الحلل في القافية واضح .

⁽١٤) * ب ، ظ : يكن عند اعتدال المرقه .

ت: في استقلال.

٧٥ وتَاكُوا ايضاً ومَنْجَالُ فُولُه ٢٦ هي إصبَعَانِ وشَلاوَمْ يا ولي ٢٧ جَامِسْ فُلَهُ وقَدح إِذْ يَشِدُوا

وفَانُونُ عندَ الملا مَعْقُولُه وقايلٌ والهرُّ مَعْ كُوْلُمْ * مَلِي والسِّيفُ والسِّيلانُ إصْبَعْ فَرْدُ

68 [قياس الفرقدين من ارتفاع سبع اصابع الى ارتفاع اصبع]

مَعَ شُمُطْرَهُ ثُمُّ مَهْكُفَتْحِ قِسِ الفراقدُ سَبْعَ ثُمُّ عَوُّل ِ • أيضاً وفي فَنْصورَ خُذْ إشارتي٠ وذيل بَرْني عنْدَ ذي الحذاقه هو راسُها الجاهي فلا تُكَابِر وَفِشُلَمْ * فَافْهَمُهُ يَاخِيرُ ثُمُّ بَرَاوَهُ خَمْسَةً قَدْ صابُوا ذُبَّانَ فِي مَلْوَانَ [وهُو]°واكِـدُ أَرْبَعَةُ عندَ الملا مَشْهُورَه تَرَى نجيمَ الصُّرْفِ قَدْ يَنْتَصِبُ إِذْ تُعلُّبُ الشَّمالِ فَوْقَ الْيَمُ يبقى يمانيًا ومنْ ثُمُّ ٱنْتَصَبُ ٢٨ أُمًّا تَلْنَجُ مَعَ دَنْجِ دَنْجِ مَنْجُ مُفْيِلِ
 ٢٩ ومنْ نواحي الزَّنْجِ فَشْتُ مُقْبِلِ ٣٠ والفرقدانِ ستَّةً في المروتِ ٣١ وقيـلَ في عَارُوْهُ ومـلُاقَهُ ٣٢ وقيلَ في أَنْوَا وفي مَقَاصِـرِ ٣٣ ويَرْهَلَهُ ، شنفا وسَنْجِافُورُ ٣٤ وسَلْتَ زَنْجِي ثُمَّ فِي مَنْقَابُوا ٣٥ وقس إذا ما آعْتَدَلَ الفراقِدُ ٣٦ ثُمَّ فَلِيْ بَنْسِجَ ۚ وَأَنْسَدَرْفُسُورَه ٣٧ حينية ياأيُّها المهذَّبُ ٣٨ في الفَلَكِ الأصْلِيْ وكلُّ نَجْم ٣٩ أَمَا ترى الطائر في برُّ الْعَرَبْ

^{●●} ب، ظ: ونيم.

⁽٣٥) * زيادة من ظ.

⁽٣٦) * ت : نج ، التصويب من ب ، ظ .

⁽٣٧) ● ب، ظ: نجوم .

⁽٣٩) ، هذا البيت مقحم في النص، وحذفه يضبط عدد ابيات هذا الفصل حسبها جاء في البيت ١٠٢ و١٠٣ من الفصل الحادي عشر

من الحاوية .

⁽٢٥) * اسقاط في ت ، البديل من ب ، ظ .

⁽٢٦) ، ب ، ظ : في اصبعان وشلاوم ت : وشتلاكم .

^{••} ب، ظ: كولت.

⁽٢٩) ♦ ت : فشر ، التصويب من ب ، ظ . ** ت: عودي ، التوصيب من ب، ظ.

⁽٣٠) ، ظ: قنصور ثم اشارت.

⁽۱۳۳) ، بنا الله عن الله المنافق .

دليلة المعقل والظليم يكفيك وصفى فأتَّخِذُ كلامِي فأفضل الكواكب الجدي وأَنْدَلُوسَ ثُمَّ مُوسى بَاري المُعَاوِدُ المُعَاوِدُ المُعَاوِدُ في ذا المكانِ إِنْهَمِ النَّظْمَ وُصُنْ سِتُونَ زاماً هي آصْبَعَانِ فَأَخْبَرَه • ثمَّ جنوبيُّ مقاسرٌ فأَفْهُمُ بإثر باري المسمها في الذكرى فراقد أصبع إخفظ التلاؤه

٤٠ وَسُطَ السما هناكَ كُنْ عَلِيمُ ٤١ وفي نواحيُّ الزُّنْجِ فَهُوَ شامِي ٤٢ مِنْ ثُمُّ للشَّمال ياذكيُّ ٣٤ أُمَّا كِتَازُه * ثُمَّ سُنْدَه باري " ٤٤ ثم مُلُوكُو قِسْ بها الفراقِدُ ه؛ وقد رُوِيْ أَنَّ مُلُوْكُوْ لَمْ يَكُنْ ٤٦ ومنْبَسَهُ ثُمُّ زَرِيْنِ المُغْــزرَةُ ٤٧ وظهرُ جاوَهُ قد رُويْ ولاسَمْ ٤٨ جَرْشِيْكُ ثُمُّ جَاوَةً والخَضْرا" ٤٩ وكُرْمَ دِيْوَهُ ثُمُّ بَسْلَرْ جَاوَه

69 [قياس النعش من ارتفاع اثنتي عشرة اصبعاً الى ارتفاع اصبع]

إنهم نَظْماً يُشِبهُ اللَّالي * ايضاً وراس الملح يا مسايل وقيلَ في كِلْوَةَ يِانِحُرِيرً مَعَ مُلالي ثمُّ جُزر [دُمُوني]*

١٥ ومَسْرُبَيْهُ ، جنزيرة فالى وجاوة ومَنْفِيسة بالهال ٢٠٠ ١٥ هُمْ نَعْشُ اثني عشر بـالدلال ِ ٢٥ والْحَرِّباء ثُمُّ خُوريا بَلْ ٥٣ [وفايَدَنُ وساسيَ تَيْمور ٤٥ وأنْجِزِيهُ ثمُّ مَنْدِواني

⁽٥٠) ، ب ، ظ: تيموريانه .

بالحال، ت: والفال.

⁽١٥) • ب،ظ: اللالى، ت: الزلال. (٥٢) ، ت : والحري بحلم جزر بابل ، البديل من ب ظر

⁽۵۳) ، زیادة من ب، ظ.

⁽٤٥) ، آخر البيت غير مقروء .

⁽٤٣) ، ت : عتاوه ، التصويب من ب ، ظ .

⁽٤٤) ♦ ت : قيس فيهم ، ب ، ظ : قاسوهم .

⁽٤٦) * ت : فاخره ، التصويب من ب ، ظ .

⁽٤٨) ، ب ظ: حوشيك .

هه ت : الحصرا، ب : الحضرا، التصويب من ظ

^{***} الاصول: قارى .

⁽٤٩) * ت : ديوه ، ب ، ظ : دنوا .

فغايةً* الفال هنا عندَ الوري بَنْدَرْ بني اسماعيل نَعْشُ عَشْر وقيل سُفالَهُ أَيُّها البيطارُ ** والإسمُ بيمارُوْهَ مِنْ زَمانِ والمُلُّ هُوْ بَنْدَرُ دَرويشَ عَلا تنزيد عَمَّا شَرَحوا قليلا جزيرةِ العَنْبَرِ * مع كلِّ المّلا وبندر النُّوب لقولي أَسْمَعَا إذا اسْتَقَلُّ الصَّرف ، سَبْعاً تَلْقَها ٥٠٠ وآخر الأخوار بالتعيين نعوشَ سِتٍّ من علومي آقْتَبِسْ مَنْكَارَ سِنَّهُ أَيُّهَا الْخِلُّ الْوفي ثمَّ رفاتي خَمْسُ في المذكورِ]" وكندلى أربعة للعالم وأَبْيَه * في القُمْرِ يامعيني هي أشْهَرُ الجُزْرِ اللواتي للنَّجا

هه والنُّعشُ فيهمْ كلُّهم إحدى عَشَرَ ٥٦ وجُزر تيمور وعند القُمْر ٧٥ أيضاً وللولجانُ والأخوارُ ٨٥ ونعش تِسْعَـة بلدة السُلطان ٥٩ وفي مُغيِّبهَا ترى أنامِلا ٦٠ ومَنْزلاجي ثُمُّ سَعْدَهُ قيلا ١١ والنّعشُ ذُبّانانِ قد شاعَ* على ٢٢ بَنْذَرْ شَجاجي ومُسَنْبيجَي معا ١٣ وإنَّ على الجُونِ تقِسْ [ذا] والسُّهَا على نسيم ثمَّ في مَـلُويْنِ
 وفي سُفالَه مُعْدَنِ النَّبْرِ فَقِسْ ٦٦ أيضاً وفي بندر شِعبانِ وفي ٧٧ [بَنْكُر هَدُودَهُ ثُمٌّ بندرٌ كوري ٦٨ بندر كوسَ ثم بندر قاسم ٦٩ وفي بنــادِرْ هَنْتَ ثُمُّ تَلَّينيَ* ٧٠ كلُّهُمُ ثلاثُ مع تيري رجا

⁽٦٣) ، زيادة من ب، ظ.

عه ت: يلتقي، التصويب من ب، ظ.

⁽٦٥) ♦ ت : التير، التصويب من ب، ظ.

⁽٦٧) (زيادة من ب، ظ.

⁽٦٩) * ت : هيث ثم بليني ، ب ، ظ : هنت

ئم تليق .

انته، التصويب من ب، ظ.

⁽٥٥) * ب، ظ: بغاية .

⁽٥٦) * ب، ظ: نعش.

جيم النسخ: بعد.

⁽oV) * ب، ظ: لولوجاز .

^{**} ب ، ظ: سوفاله بانتظار .

⁽٦٠) * ب، ظ: والمنزلاي .

⁽٦١) ، ت : سامح ، التصويب من ب ، ظ .

ت المير، التصويب من ب، ظ.

⁽٢٢) * ت : شهالي وسهيل . ب ، ظ : شهالي

٧١ وفي هَــدودَهُ نَعْشُ إصبَعَيْن ٧٧ بَنْدَرُ كُوْسَ ثُمٌّ غُبَّةٌ كوري ٧٢ نَعْشُ أَصْبَعِ [قد] الرُّخوهُ العُلَمَا ٧٤ وإنْ تَقِسُ بِآخِرِ الداموتي ٧٠ نصفُ أَصْبَعِ العَنَاقُ ثُمَّ الجُونْ ٧٦ لأنَّ ذا الحرُّ برِّ السِّزُنْجِ ٧٧ [ولا جَنُوبِيْهِ سوى الأرقاق ٧٨ والمعضُّر قالوا هذه جزائرُ ٧٩ وآختَلَفَ النَّقْالُ مِنَ السرواةِ

ثم تِمَارُوه تُكفُ شر البَيْن مع بندر الشَجْرةِ [ذا] * المَشْهورِ ولا سوى هذا يرونَ فافْهَما٠٠٠ على بنى نَعْش قُبَيْلَ الفَوْتِ ولا سُهَيْسلُ دابسر وركسون ويابُ بَرُّ الغرب والإفْرَنْج وظُلْمَةِ يعلمُها الخَلْاقُ] * وآخرُ المُلِّ خَمْسَةٌ ياخِـامِرُ ۗ وأَسْتَغْفِرُ الله مِنَ الزلات

⁽٧٦) * ت : في ، التصويب من ب ، ظ . (٧٧) ، زيادة من ب، ظ.

⁽٧٨) * ت : يا مشاور . البديل من ب ، ظ . (٧١) * ت : نياروه نكوش ، ب ، ظ : تمادي

تكف شر.

⁽٧٢) ﴿ زِيادة من ب ، ظ . وفي ب ، ظ : بندر الشحى.

⁽۷۳) ، زیادة من ب ، ظ .

[🗪] ب، ظ: يزور يسمى .

⁽۷۵) ، ب : قابر .

الفصل العاشر

في معرفة تغني عن الاستواءات وقطع الأزوام . وذكر ما يتعلق بالربان ، كتفصيل القلع ، ومعرفة جري الماء في الباحة والبحر المحيط الواغل بين برِّ السودان والهند والصين. والله أعلم بالصواب.

70 [آفات التربئة]

لكنُّما النُّسَاخُ غَيْرُوها مِنْ عَصْر إِسْكَنْدَرْ لذي الأوقاتِ مِنْ غَيْسِرِ إثباتِ واستيقانِ في تُجْرِبَهُ هذي الفُنونِ جَمْعا علماً بلا تُجْرِبَةٍ مَعْلُومَه معروف مَمْ كلِّ الأنام مُشْتَهَرُّ

١ وألاستواءَاتُ فَجُربوها ٢ وصَيِّروا في التَّرْبَنَهُ آفاتِ ٣ ويُكْتَبُ العِلْمُ مِنَ السُّكْــرانِ ¿ والعُمْرُ ما يُسْعِدُني أَنْ أَسْعِي • ه ولَمْ أَكُنْ أَجْعَلُ في المَنْظومَه ٦ لكنَّني أذْكُرُ شيئاً يُعْتَبَرُ

71 [معرفة تفنى عن الاستواءات وقطع الأزوام]

٧ عليكَ بِالجَاهِ وبِالفَراقِدْ والنَّعْشُ إنْ غابوا إليكَ واكِدْ

⁽١) • ب، ظ: لكنها.

⁽ە) چەب، ظ: علمى. (١) چېنظ: معتبر، (٤) * ت : يسعد في ان يسمى ، البنيل من

ب، ظ. واسعد هنا بمعنى ساعد.

إِقْطَعُ لأزوامِكُ بِهِمْ ياجاري عَن حِسْبَةِ القياس لا تُخَلَّا وهم على فطيَّةِ المُشَيِّعُ نَجِماً وَقَيَّدُ ثُمَّ إِجْرِ وَآكْتُب بحالها قياسها لايخلا إصبع فَحَقَّق أيها المسافِر أزوام لَمْ تَنْقُصَ بل هي وافيه بحاله افتهم الموصيه أخنانُ ستَّهُ فأعملوا عليه إِنْ كُنْتَ فَتُاكاًعميقَ الفِكْر ثمانية أزوام كلِّ إصْبَعْ نجم فُويْق الراس يا أُخى والحكم بالتحقيق بالسواء [من] مامي للحدُّ ما فيه سَلَبْ " آفاتُهُ مِنَ اللَّذِينَ أَوُّلُوا ا مسيرهم فسالسوا فادروا

 ٨ وحسبة الديرات والمجاري ٩ وإن تــرى نجمين إسْتَقــلاً ١٠ من حطبةِ اثني عَشَرْ إصْبَعْ ١١ فَقِسْهُما وَقِسْ بِعَجْزِ الْمَرْكَبِ ١٢ نقصانَ نَجْمِ العَجْزِ أَمَّا هَوْلاً • ١٣ فكلُّما غاصَ نُجَيِّمُ التَّفُرِ * ١٤ لأنَّ مَرْكَبَكُ قَطَعْ ثمانيه ١٥ أمَّا الذي قَيَّدْتَ في الفَطِيَّه ١٦ فيها سويّ الطائر مايليه* ١٧ كفاك هذا في جميع البَحْر ١٨ دليلُ ذا نَقْصُ الجُدَيُ * فَأَسْمَعُ ١٩ لَكِنْ اذاء شاهد الجُلَى ٢٠ وذي الشُّهودُ فَوْقَ وَجُّهِ الماءِ ٢١ والتِّيرُ والواقعُ في برُّ العَرَبْ ٢٢ وسائر الأقطاب فيها الخَلَلُ ٢٣ والتِّيـرُ والـذِّراعُ ثُمَّ النُّسُـرُ

⁽١٩) * ت: ان البديل من ب، ظ.

هه ت: فوق، البديل من ب، ظ. (٢٠) ، ب ، ظ : واحكم بتحقيق على السواء .

⁽٢١) ، زيادة من ب، ظ.

[٭] ب، ظ: سبب.

⁽۲۲)

• تقته من الدنن اولوا ، ب ، أفاته من الدير الأول ، ظ: آفاته من الدين الأول .

 ⁽٨) • ب، ظ: لازوامك، ت: ازوامك. (١٢) ، ت : ماهولا ، التصويب من ب ، ظ .

⁽١٣) ، ب نظ: التقر.

⁽۱۵) * ت: فيه تبقى ته، التصويب من

⁽١٦) ، ت : عليه ، التصويب من ب ، ظ .

⁽١٧) + ت : كذاك . ب ، ظ : اذا .

⁽١٨) * ت: انقص الحد، التصويب من

ب، ظ،

٢٤ فيإن تَغِبُ شِعْراءُ بِالحدُّ ٢٥ تسعُ أصابِعْ والذِّراعُ اليمني ٢٦ فكلُّما غاصَ الجُدَيُّ إصْبَعْ ٢٧ أمَّا الذَّراعُ فهـو في البرَّينِ ٢٨ في زُجَدٍ إِنْ قِسْتَ نَجْمَ النَّير ٢٩ خَمْسَ أصابِعْ والذِّراعُ أَثْنَا عَشَرَا ٣٠ قِسْهُ الى العادةِ في القياس ٣١ إِرْقَاقُهُ ياصاح والإغرارُ * ٣٢ جار مِنَ الهندِ لبرِّ العرب ٣٢ رُبِعاً فأعْلَمْ ما من الإزوام ٣٤ إنْ [كان] مجراكَ على الهيرانِ ٣٥ أمًّا الحماران بجاه أحدى عَشَرْ ٣٦ وَقِسْ لِسَهْمِ القوسِ والسُّهَيْلِ ٣٧ وكلُّما مِلْتَ لَهُمْ بِالنُّقُـلُ*

72 [تفصيل قلع المركب] ٣٨ وإنْ تُردُّ تفصيلَ قلع ° المركبِ _

فالنُّسُرُ والنِّراعُ كلُّ عندي في غربهِ والنُّسْرُ يا ذا الفِطْنَهُ أَنْقِصَ ايضا النُّسْرَ رُبُّعَ إصبعُ ينقُصُ نِصفاً نظراً بالعين عندَ طلوع الكاسِرِ المَشْهورِ* يَنْقُصُ نِصفاً في التَّرْفَا شَهْرا* غايتُهُ مَشْهـورةً في م النَّاس مثالُه إِنْ كُنْتَ ياذا جَارُ وزادَ في هذي الكواكبُ فأحسب فَطَعْتَ عَشْراً كُنْ بالتّمام مَيِّزٌ حسابي ٥٠ وأفْهَم المعاني خَمْسٌ وأربَعْ للمربُّعْ ذُكِرْ أربعة بالحد ياخليلي مزيدَهُم ٥٠٠ نقص قياسَ الأصلى

فأتِ به في موضع منسحبٍ**

⁽۲۵) ، ب نظ: غربه ، ت: غروبه .

⁽۲۱) 🛊 ب، ظ: انقص، ت: نقص.

⁽٢٧) * الأصول: نظروا.

⁽٢٨) ♦ ت: الكاثر المنبر، البديل من

 ⁽۲۹) * ب، ظ: ينقص عشرا فالترفا شهرا.

⁽۳۰) * ت: عادته ، ب ، ظ: غاية .

^{**} ت: عند، البديل من ب، ظ.

⁽٣١) * ب ، ظ : ارى فاقه ايضاً مع الاغزار .

⁽٣٣) ، ب، ظ: ان .

⁽٣٤) ، زيادة من ب، ظ.

^{**} ت: حسابك، البديل من ب، ظ.

⁽٣٥) ، ب ، ظ: وخمس.

⁽٣٧) ، ت : تكاملت لهم بالقتل ، التصويب من ب،ظ،

تظ: من يدهم، التصويب من ب. (٣٨) ع ت : قطع ، التصويب من ب ، ظ .

[•] جيم النسخ: مصطحب.

مُسْتَعْمِلًا فيه قياسَ العادَه وبعدَ هذا مُرْ بهنَّ الراتِقا فمُدُّ عودين بعرْضِ القِلْع لِيَشْحَطَ الداسجُ بالتَّمْريرِ *** مِنْ قَبْلِ فِعْلِ كُلِّ شِيءٍ كَانْ لا يَخْتَلِفُ فِي اللَّرْعِ صَفًا وَأَحْكِ* وقيُّمهِ السركُ ولا تُحاجِج للجوش من خَمْسَة بغير مَيْن وداسجُ [في]** الجوش فأعْرف حقُّه مِنْ أَرْبَعَهُ للنَّفْسِ * أَرْتُقُ وَأَحْكِم وكليا بالشُّخط أحُكموها وأَطْرِفْ *** لَهُ مُحًّا الى التفصيل

٣٩ وآغْـرُزْ به أربعـةُ أوتـادَه وأنشِر المُحوَحَ* والشقائقا 13 فإنْ رَتَقَتْ الكلِّ بعد الذَّرْع ٢٢ بالدَّاسِجين الشَّكُ والجامورِ ٤٣ وبعيدَ مدُّ هيده العيدانُ ه، وأضرب مُحُوحَ يا أخى الدُّواسِج * ٤٦ حسوالي الكُنْجَة في سَهْمَيْن ٤٧ أيضاً وفي الدَّامَنْ بِثَلْثِ شُقَّهُ ۗ ٨٤ وأَجْعِل الرك ثلاثة أسهم ٤٩ حيالُ هي* دواسجٌ سَمُـوْهـا ٥٠ وآدرا الى الداسج شَطُّ الذيل

(٤٥) * ب، ظ: واضرب يا أخى المحوح بدواسجی .

(٤٦) * ب، ظ: حوالتي .

(٤٧) ♦ ب، ظ: لثامن شقه، ت: ثالث شقه .

** زیادة من ب، ظ:

(٤٨) * ت: لنفس، البديل من ب، ظ.

(٤٩) ♦ ب، ظ: من.

(٥٠) * ت : ودار ، التصويب من ب ، ظ .

٭ ب، ظ: شطی .

ععد ت: واضرب. والبديل من ب.ظ: وأطرف بمعنى اعطاه او الحق به .

(٣٩) * ب ، ظ : وزام فيه ، ت : واغرز فيه . (٤٠) ♦ ب، ظ: وانشرح المحوج، ت،

وانشى.

* ب ، ظ : وبعد هذا مرجم ، ت : وبعد ذا المريهن.

(٤٢) * ت : بالراسجين الشك ، ب ، ظ : بذي سحير السيك .

****** ت: يشحط، التصويب من ب، ظ.

*** في جميم النسخ: بالتحريس، وهو تصحيف .

(٤٤) ♦ ب: واعملوا الدور قبل ، ظ: واعملوا الدور قبيل .

ت: منه واحك ، ب ، ظ: صفه واحك .

بعد حساب سوفَ أُنبيكَ *** به كَالدُّقُلِ أَ الزَّامِلِ *** لا يَزُولُ هُوْ خُذُ * صفاتي وحسابي فاسْمَعُه رَكِّبُهُما عن نِصْفِ عَشْرِ لهما للدَّاسِجِ * التَّحتي في البِّيــانِ وقالَ ثُلثنا بَعْضُ أهلَ الخِبره وزَيِّدوها البعضُ يـا أصحابي وأَضْرِبُ دُرُورَكُ في الْحَوْزِ وارجع والنَّفْس فارْتُقُه ٥٠٠ بـالا تُواني عِنْدُ الجَوَشْكِ والعَرَبْ يا صاحبي كل له قَصد سوى ذا القَصَدُ والبعضُ مِنهم يتلافي ** البيانُ والقصد شيء يحبس الارياحا

١٥ وآزَنُّقُهُ للمُحُّ وكُنْ مُنتَبِه. ٢٥ العرضُ كالفَرْمَن أمَّا الطولُ ٥٠ ٥٣ والجوش جزءٌ ناقص عن أربعه ٤٥ والجوشُ والدَّاسِج ياخيْ فآفْهَمَا هه وثُلْثُ رَكً الدَّاسِجِ الفُوقاني ٥٦ ونصف رك الجوش هو للشفره ٥٧ وكَنْجَةُ الجَوشِ على الحِسابِ ٨٥ كلُّ ذِراع فيه تُلْثَيْ إصْبَعِ ٩٥ للفت والرِّنْقة والـدّامان ٦٠ فهذه تفصيلة المراكب ٦١ والصِّينُ والإفْرَنْجُ ثُمُّ الهند ٦٢ والبعضُ* منهم زَيَّدوا الدامان** ١٣ والقلُّم * هو مُرَبُّعُ قد * لاحا

واللجون، ت: في الحور. والوزن غير مستقيم .

(٥٩) ، جيم النسخ: لفشت.

** ت : والنعش وارجع ، ب ، ظ : والنفس

(۲۰) ، ب، ظ: المند .

(٦١) * ب، ظ: ويعض.

(٦٢) * ت: ربعض .

الداماني ، التصویب من ب ، ظ .

*** ت: تلثى، ب، ظ: تلاقى،

(٦٣) * في جميع النسخ : والليل .

♦♦ ب، ظ: اذ.

(٥١) * ت : للميخ ، التصويب من ب ، ظ .

** ب، ظ: متبته .

*** ب، ظ: آتيك.

(٥٢) * ت: كالفرسل، التصويب من

** ب: اطول.

*** ت: الدامر، ب، ظ: الدامل.

(٥٣) * ب، ظ: وخذ.

(٥٤) * ب، ظ: لكتها.

(٥٥) * تب: لداسج، ظ: كداسج.

(٥٧) ♦ ب، ظ: وزيدة.

(٥٨) * ب: درورك والجون، ظ: درورك

٦٤ لكنَّما الحكمةُ فيمن قد علا *

73 [معرفة جري الماء في الباحة] ٦٥ وأرْفقُ بالعلَّة بالمُطالَّب ٦٦ وإنْ تُرِدْ تُعْرِفَ جَرْيَ الماءِ ١٧ من مايةِ الى ثلاثِ مايَه ٦٨ ومن ثلاثِ مايةٍ في الشَّمال ٦٩ مدَّتُهَا عشرٌ بهذا الموسِم ٧٠ هذي صفات البحر أمَّا البَّرُّ

وهَوِّنِ العسكرَ * في المُقالَبه وكُوْنَهُ في الباحة الكبرء ترميكُ في القطب الجنوبي المايّه للتَّيرَمَا ثمَّ تُقِفُ ليالى وفى ثُلَثْ ماثةِ أيضاً فأعْلَم حاياتُ أَوْ مَدُّ يَكُونُ أَو جَزُّرُ٠٠

عند فساد الربح ، فُلْكاً زلَّلا **

⁽٦٦) * ب، ظ: لكونه.

⁽٦٧) ♦ ت : ترضيك ، البديل من ب ، ظ .

⁽٦٨) * ت : تقف ثم ، البديل من ب ، ظ .

⁽۷۰) * ب، ظ: مياه.

^{**} ب، ظ: في الجزر.

⁽١٤) * ب ، ظ : لكن الحكمة فيها علاً.

به س،ظ: زلا.

⁽٦٥) * ب: ارفق في ، ظ: والرفق به . په ب: واوهن في العسكر، ظ: والوهن

بالعسكر .

الفصل الحادي عشر

في تقويم يعرف به الساعات ودخولها [والسبعة السيارة] وأزوام الجمة والنجوم والشمس والقمر ومعرفة النجم الزوجي ودليل الأخنان ودليل الطوفان وتاريخ الأرجوزة بما يوافق ذلك من الحساب. والله أعلم بالصواب.

74 [معرفة المنازل الطالعة والأفلة]

وقسمة الجُمّة بالتَّمام ما كان منها مُشْرِقً و وَأَقْلُ لكلٌ ساعة مُشْرِلة وسُدْسُ ثلاث أيضا ثمَّ نِصْف كامِلُ كي تَمْرِفَ البُرُوجَ بالتَّمْييرِ من بعد سبعين عليها وافيه وعُدًّ يا صاحْ من نُجيم " الزُّبْرة

 رَمِّنْ أَحَبُ مَعْوفة النام فَلْيُفْتَقِدُ في جُمْلَةِ المَنازِلُ والبَّدُرُ بالليلِ معاً والشمسُ وكلُ زام فَلَهُ المَنازِلُ اوُلُ ما تَشَدأُ في النَّسروزِ خُذُ ما مضى منه وزِدْ ثمانيه v وَآجُغُرْ الكارِّ مُثْرِل للتُ عَشْرَه v وَآجُغُرْ الكارِّ مُثْرِل للتُ عَشْرَه

مەمەب، ئا: طالمأ.

⁽١) ه ب ، ظ : سبعون عليها ثباتية .

⁽٧) ، زيادة من ب، ظ.

عه ت : صاح بنجم ، البليل من ب ، ظ .

ب، ظ: به الساعات.

^{**} زيادة من ب، ظ.

⁽۱) * ت: لقسمة، البديل من ب، ظ.

⁽۲) * ب، ظ: فليفتقد.

٨ فما أنتهى له من الحساب ٩ والشَّمسُ في ثالِثَةِ المَنازلُ ١٠ ويستوي الشَّهْرُ برابع مُنْزِلَه ١١ وإحْسِب الشَّمسَ معاً والبَدْرا ١٢ لكنَّ ذا الذي وصَفْتُهُ لـك٠ ١٣ في كلِّ عامْ رُبْعُ من الأيَّام 1٤ وفي الكبيسَة بين أصحاب النَّظر ١٥ نَظَمَّتُهُ إِذْ عَمَّ وصفي في الورى ١٦ وخيـرُ ما لِلْجُمَّـةِ المُقَسَّمَهِ ١٧ تـركتُهـا إنِّي لا أُصِيبُهـا *

هو طالعُ الفَجر على الصّواب أعنى التي الفَجر بها يا سائِل إنْ كان وافي ﴿ قِسْ على ذَا وأَعْمَلُه * * بأيِّ بُرْجِ إِن تريدَ الفَجرا كبيسة يَعْرفها أهل الفَلَكْ من هجرةِ الهادي للأنام سَهْلُ آختلافِ نَقَلوا • الخَبَرُ مَا لَلْجُوادِ رَاكِبُ أَنْ يَهْجُرا بناتُ نَعْشِ السَّبْعَةُ المُعَظَّمه طولَ الزُّمانِ فآفْهَمَنْ عَيْبَها••

75 [معرفة بروج المنازل]

١٨ أمًّا المنازلُ التي وَصَفْتُ لَكُ ١٩ لَكُلُّ بُرْجِ مِن ذوي المَنازِلُ ٢٠ فأول الهناع • الى السَّرْطانِ
 ٢١ وهذه البُرُوجُ خُذْ منى الخَبَرْ ٢٢ فإنْ تُردُ تَعْرِفَها خُدُه مَا حَضَرْ

إِثْنَى عَشَرْ بُرْجاً تُصادفُ في الفَلَكُ مَنْزلتانِ ثُمَّ ثُلْثُ كامِلُ وأوَّلُ العبواس الى الميسزانِ تَنْزِلُ بِهِا الشَّمسُ وأيضاً القَمَرُ عِنْدَكَ مِنْ نيروزكَ الذي آشَّتَهُوْ

** ظ: نقلوا الحر، ت: نقلو ذوي الحبر.

(٩) * ت : على التي بالفجر ، ب ، ظ : لدى

(١٠) * ب، ظ: الشهر مصحح الفجر.

🕶 ب، ظ: وامي .

*** ب، ظ: واعلمه.

(١٢) * ب ، ظ : لكن الى هذا وصفت لك . (١٤) * ت : كبيسة وهي عند اهل ، البديل من

ب،ظ.

 الأصول: النفر. (٢١) ، ب ظ مي .

ب: نقلوا ذا الحبر.

(١٧) ، ب ظ: اصينها . ** ب، ظ: عينها.

(٢٠) * ب، ظ: الكبر، ت: الكثر

⁽٢٧) * ت : صف ، البديل من ب ، ظ .

۲۲ على مِنَ الأيَّام سِتِّينَ وعُدُهُ لَكُلُ بُرْج شَهْرَ بالصَّوابِ ٢٥ لكلَّ بُرْج شَهْرَ بالصَّوابِ ٢٥ من شَهْركَ العربي ، ومثلة وأقسِم ٢٧ إنَّ السَملَدُ أوْلُمهُ مُشَفَّقٌ ٢٨ فالبدرُ للبُرْج الأخير واصِلْ ٢٨ نصفُ ثلاث لورق ماضى الشَّهْر ٢٩ نصفُ ثلاث فوق ماضى الشَّهْر ٢٩ نصفُ ثلاث فوق ماضى الشَّهْر

76 [معرفة الساعات]

٣٠ وإنْ تُردُ أن تَعْرِف الساعاتِ
 ٣١ من أوَّل الشَّهْ لِنِصْفِ الشَّهْ الشَّهْ الشَّهْ الشَّهْ السَّعَة الشَّهُ المَّعْ عَلَمُ عَلَمُ اللَّحْ على كَمْ يَطْلُحُ
 ٣٢ في سِتة وأقيمه مبتعة مَيْعة مستعة تَيْنَا
 ٣٥ وأقيم الى السَّاعاتِ سَبْعة حتَّى
 ٣٦ فذاكَ يَضْفُ اللَّيلِ ما فيه مِرا
 ٢٧ كذا مِن النَّصْفِ لِراس الشَّهْ لِرَاس الشَّهْ المَّد وَنَّ تُودُ تَعْمَل بِالمَنازل
 ٢٨ تَشْهِمُها وتَضْرِبُ مِثْلَ المَمَنازل
 ٢٨ تَشْهُم وَنَصْرِبُ مِثْلَ المَمَنازل

من بُرُج الميزانِ الْجزا وخُدُهُ فَالشَّمْسُ فِي الغايةِ فِي الحِسابِ ورَده أيضاً خصسةً مع ما حَضَرُ لكلَّ بُرج خَمسةً [ذا]* فأعلَم من بُرُج الشَّمسِ الذي تَقَدَّمُ أِنْ شِئْتَ أَنْ تَعْرِفْهُ فِي المَنازِلُ وأَحْسِبُ إليه من نُجَيْم الفَجْرِ الفَجْرِ وأَحْسِبُ إليه من نُجَيْم الفَجْرِ الفَجْرِ

على غروب البَدْدِ والطُلْعاتِ
تَعْرِفْ على كَمْ ساعة أن تجري
من ساعةٍ تَضْرِبُهُ إِنْ يَبْحَتَمِعْ
مثالَّهُ فِي الشَّهْرِ كان سَبْعَه
إِنْنِنِ جَاءَتْ بعدَ أربعينا
يَصِرْنُ من ساعاتِ عِنْدُكْ سِتًا
لاَنْهُ جميعه آثنا عَشَرَا
احسبْ طلوعة في [طلوع] الدَّهْرِ
في طالع أو وَتَدِ أو آفِل وَ

** ت: عنك، ب، ظ: مات عندك.

(٣٨) ب، ظ: في طالع ان بدا وأفل.

(٣٧) ♦ زيادة من ب، ظ.

⁽٢٣) * ت: علد، البليل من ب، ظ.

⁽۱۱) تا تا در تا در البدیل من ب ، ظ.

⁽٢٦) * زيادة من ب، ظ.

⁽٣١) * ب، ظ: ونصف.

⁽۳۲) ≄ب،ظ:مایین.

⁽٣٤) * ب، ظ: ثبان.

⁽٣٥) * ت: يضرب، التصويب من ب، ظ.

 ⁽٣٩) ● ت، ب، ظ: اقسمها واضویها.
 ● ب، ، ظ: بان تری الساعة عن القسم قصر.

إنَّ لها في الفَسْمِ سَبْعَةُ أَجْزَا ٤٠ فذاك أسباع لِساعَة تُجزا عندَ أُلِي ٱلْعِلْمِ زمانٌ يأتي ٤١ وآعُلُمْ بِأَنَّ هِلْهِ السَّاعَاتِ عبطاردا والبدر ببالأمبارة ٤٢ يصادفونَ السُّبعةَ السَّيارَة مرِّيخُهُ والشَّمسُ ثمَّ الزُّهْرَهُ ٤٢ ثمَّ زُحَلُ والمشترى قدْ جَرَّهُ ٤٤ هم سَبِّعَةً لهنَّ سَبُّعَة أحرفِ والمُبْتدا من الأخــد فأعْرفِ إليه شرح ديها أشاروا ه٤ دَيْهَلُ سَرْخُ ، الليلُ ، والنَّهارُ تَعْكُسُ المذكورَ ياظريفي * ٤٦ هُم كِلْمَتَانِ سَبْعَةُ خُـروفِ عطارد فالـدَّال مَيِّز وآحسِب ٤٧ أُولُهُم آخر حروف الكوكب واللامُ للنَّحْس وشَمْسٌ سينُها ا ٨٤ والمُشترى للياء والزُّهرهُ ها سَمُّوه بالمريخ خا منْ غير شَكْ* والقمرُ البرا وَجَبُوادُ الفَلَكُ والسين ياتي أوَّلَ النهارُ ٥٠ الى عسطارد غست تكرار آخِرُ حَرْفِ أَوَّلُ الصَّريم اعنى الأحَد هو مُبتدا التقويم

77 [معرفة النجم الزوجي]

٧٥ ومنْ أَحَبُ معرفة الزَّوجي ٥٥ فدورة الزَّوجي الاختان ٥٤ في الاختان ٥٤ معرفة للخن بكلُ شَهْرٍ ٥٥ فجملة الأحاد والخمسات ٥٦ والأربعات والشواني القَلْبُ

دخولِهِ الأخْنسانَ والخروجِ في كلَّ شهرِ فأفْهَمَنْ تَبَيّاني ثلاثةَ أيَّامُّ بطول ِ الـدُهْرِ في الزَّوْجي * الهيرانُ قبلَ ياتي طلوعُهُ ياصاحيي والغربُ

⁽٤٥) 🗢 ظ: وحيل.

[●] ب، ظ: دمیل.

⁽٤٦) * ت: للمذكور بها الصرف البديل

ب،ظ. (٤٧) • ب،،ظ: كذا.

⁽٤٨) * ب، ظ: سيرها.

⁽٤٩) * ت : جلاد، ب، ظ: له اوجاد.

خالا شكك.خالا شكك.

⁽٥٢) * ت : ومن آخر معروفات .

⁽٥٥) * ت : قالزوجي . البديل من ب ، ظ .

 ٥٠ أمّا الثلاثاتُ مع السَبْعاتِ
 ٨٥ والسِارُ للسِسَّاتِ والثَّمَانِ ٥٥ وآخر العشرات عليه الأرضُ ٦٠ فَأَحْذُرُه ثُمَّ إِحْذُرِ الأصحابا

فهي الى الأقطاب يا ثقاتي والوَتَدُ الأَتْساعُ خُذْ بياني وقال في التاسع هذا" البعضُ وآفْعَلْ لهم بالنصح كي تُثابا

78 [معرفة اشاير الطوفان]

٦١ والواجبُ الرُّبَّانُ أَنْ يُطاعا ٦٢ خصوص إنَّ وافَقَ للعلوفانِ ٦٣ مثالَّهُ إِنْ كَانَ شَمِسٌ أَو قَمِرْ ١٤ وإنْ تَكُنْ منادلٌ شلائمه ٦٥ بغير باب في الصباح والمسا ٦٦ والبحرُ أَزْحُنَّ ورُثِيْ السَّرْطَانُ ٦٧ وَٱقْصُـدُ بعزمِ ٱقْـرَبَ البنادرِ ١٨ وإنْ تَرَى المندلَ بَعْدَ الظُّهْرِ ٦٩ وإنَّ رأيتَ الرُّعْدَ بانَ والمَطَرُّ ٧٠ والبرقُ إنْ رأيتَنهُ مُسِوْتفعا ٧١ وإنْ تَرَ البرقَ بوجْهِ اليمِّ ٧٧ ياتيكَ في أمكنةِ ريحُهُما ٧٣ هذا الذي وافقَ في الحساب

في كلِّ مايُريدُ ياشُجاعا أشاير تُعْرَفُ في الزَّمانِ لهُ مَنَادِلُ فالحَذَرُ كلُّ الحَذَرُ منيسة ايائها ثلاث والوبد والحياء والغيم رسا فديّر الفُلْكَ ولاتتوان يكفيك ربي جملة المَحاذر فَأُوُّلُ الرِّيحِ عِنْدَ أَهْلِ الْحُبْرِ يأتى بلا جِبُّ * ضعيفاً مُحْتَقَرُّ فالرُّبحُ تاتيكَ ولا تُمْتَنِعا فحكمه كَحُكُم حرَّ النجم وأمكنه لَمْ تاتِ فَأَفْقَهُ وَٱفْهَما من كلِّ ما يُذْكَرُ يا أصحابي

(٦٥) * ب : والوتود الحياة .

⁽٥٨) * ت: الاسباع، التصويب من

ب ۽ ظ . (٥٩) 🖝 ب ۽ ظ: متهم .

⁽٦٠) * ظ: فاجتبه واحفظ، ب: فاحذره واحفظ

⁽۲۹) ه ب، ظ: سار. حصر، التصویب من ب، ظ.

⁽۷۱) ه ب، ظ: آخر، ت: حرَّ.

79 [الخاتمة وتاريخ الارجوزة وعدد ابياتها وابيات فصولها]

٧٤ فلو أُرد تبطويلَ كلُّ فَنَّ ٥٧ قصدى الأصولُ في علوم البحر ٧٦ قد راح عمري في المطالعاتِ ٧٧ وكم رأيْتُ في قطوطِ * الشول ِ ٧٨ وكم نَظَرْتُ في حسابِ العَرَبِ ٧٩ لم أرَ شيئاً في أَتْفَاقِ الأصْل ٨٠ وفي جنـوبي جـاوةٍ والصين ٨١ والعقلُ أصلاً قطُّ ما علاعَ وَرَقْ ٨٢ من أجل ذا إنَّى آختصرتُ نظمي ٨٣ أُودِعْتُ في أُرجوزةٍ غـراءِ ٨٤ جاءَتْ كما جاءَ الشَّهابُ يُسْتَضا ٨٥ تمُّت بشهر الحجِّ في جُلفارِ ٩ ٨٦ في يـوم عيدِ أبـركِ الأيَّام ٨٧ وكان في التاريخ يا سولاي ٨٨ سَمَّيتُها بالحاوية باصاح ٨٩ ولا ألامُ بعد سوتي فيهـــا ٩٠ قرأتُها على أهيل الصَّرْفِ*

لَمْ تَطِق النَّسَّاخُ تَنْسَخْ عنِّي لاقصدى الهرجُ وكثر الشعر وكثرةِ التسآل ِ في الجهاتِ ونظمه والنثير والفصول وحسبةٍ للهند مُذْ كُنْتُ صبي في الفُمْر والزُّنْج صحيح النُّقُلِّ والفال علماً صادق اليقين أَنْ يَعْتَقِدُ فِي طِرْسِ قطِّ ورقُّ حَكُنْتُ على حقيق علم هيهات أنْ يُهْدَى لها سوائى يا حاسدي مُتْ كَمَداً أو غيضا أوطانِ أُسْدِ البَحْرِ في الأقطارِ إذْ خُصٌّ بالإحسانِ والصِّيام سِتُّهُ وسِتُّونٌ وثَمانٍ مايــه تُضيءُ للجاهل كالمصباح إنْ يغلطِ الكاتبُ أو قاريها والنُّحُو والعربانِ * أَهْلُ الْعُرْفِ

⁽٧٥) * ب، ظ: قصدي العلوم .

هه ب، ظ: المترح

⁽٧٧) * قط جمع قطوط: كتاب.

⁽٨١) هاب، ظ: قد ماطاع.

ب ، ظ : في سطر قط ورق ، ت : خط ورق .
 وورق .

⁽٨٤) ♦ ت : بيضا ، التصويب من ب ، ظ .

⁽Ao) ♦ ت : جرفال ، التصويب من ب ، ظ . (A1) ♦ ب ، ظ : يوم الغدير .

⁽٨٦) ف ب، ظ: يوم الغدير.

⁽٨٧) ، ب، ظ: في الهجرة.

 ⁽٩٠) (٩٠) حت: اهل العرف، التصويب من
 ب، ظ. ب، ظ: تلوتها على أهيل العرف.

المرقان، البديل من ب، ظ.

19 وما حَوَث رَهْما تَنجاتُ يا فتى الله بصائرٌ لي في أصول التَّهْلِمَهُ ١٩ بصائرٌ لي في أصول التَّهْلِمَهُ ١٩ إذا رآها العارفُ الخبيرُ ١٩ وعاينَ الفصولَ والوسباتِ ١٩ فصولُها يا صاحبي أحَدُ عَشَرا ١٧ ففصلُها الأولُ خمسونَ عَدَدُ ١٩ وفصلُها الثاني ستينَ أتى ١٩ مائةٌ وسبعونَ لرابع فَصْلِ ١٠ مائةٌ بيتٍ وشلائينَ مَعَهُ ١٠٠ سابعُها قَدِ آستَطالُ وآختملُ ١٠٠ سابعُها قَدِ آستَطالُ وآختملُ ١٠٠ والمَن الفصولِ سَبْعونُ واقِيهِ ١٠٠ والمائيةُ وأما العاشرُ

الله وَقَتْهَا صَفْوَةٌ وَنَعْتَا بنبذة يُرْوونَ له مُسْتَحْكَمَه وسيَّزَ الأوَّلَ والأحيرِ دعا لِمَنْ ينظُمُ ذي الأبياتِ لا تزيد بيتين لذاك قد وَقَتْ إحبيب تَجدهن وتَسْمَعْ وتَرى وفوقها خمسة أثياتٍ مَدَدْ وفصلها الخامس إليه تُملي مائة وخَسْمة في ثمانين كَمُل تاسعها سيعون بيتاً صافية عسبون بيتاً عدها المباشِلِ

(٩١) • ت: وفيها صفه، ب، ظ: وفيها صفوة.

بمد تصحيح التصحيفات الواردة في أبيات

سابقة .

⁽٩٢) * ب، ظ: نظياً لرمز.

۱۹۰۰ ب، ظ: بمدة يرونه .

^{. (}٩٣) ، ند: المالم .

⁽٩٤) * ب، ظ: الحساب،

ب ، ظ : دعا لناظم الأبيات ، وفي الظاهرية مصححة بخط حديث مختلف : دعا الى الناظم بالثواب .

⁽٩٥) ۽ ٻ، ظ: جلتها.

⁽۹۷) ه ب ، ظ: عدد .

⁽٩٩) ، ب ، ظ : تسعون . انظر حاشية البيت

١٠٧ من هذا القصل . ودر حريب خاصطلاح أبان والساف

⁽۱۰۰) * ب ، ظ : وثلاث أبيات والسادس تسعة : ت ثلاثة والسادس ماثة وتسعة . انظر

البيت ١٠٢ من هذا الفصل.

⁽١٠٢) هو وافية بحفى زائدة . يقال درهم وافي ، اي زائد . فيكون الفصل الثامن ٢٩ بيتاً . ويذلك يصبح عند أبيات الفصول صحيحاً وساوياً لما جاه في البيت ٨٧ من هذا الفصل

⁽١٠٣) • ب: له سبعون بيتاً اتاها .

غه زیادة من ب، ظ.

١٠٤ وفصلها الآخِرْ هو الحادي عَشَرْ
 ١٠٥ عيبُها إلا لفقدِ العارفِ
 ١٠٠ فإنْ تَجدْ فيها خلافاً أو خَلَلْ

مائه وعَشْرَهُ ثُمَّ خَمْسَهُ في الفَدَرْ وعالم لِلْغَلَطَاتِ كاشفِ حازَ الكُمالَ خالقي عزَّ وجَلْ

80 [مؤلف الحارية]

١٠٧ أَلْقَتُها بعد ثباتٍ حَسَنِ ١٠٧ أَنَا الفقيرُ والضعيفُ الراجي ١٠٥ أحمدٌ بنُ ماجدِ الشهابِ ١١٠ أَفْرا لنا الحمدَ مع الإخلاص ١١٢ وأله الله كلما هب الصبا ١٢٠ وأله الكرام أهل النسب ١١٤ وما سرى معلمٌ بشلكِ ١١٥ وما سرى معلمٌ بشلكِ ما ومن فكري من فكري

بفضل خالقي ومَنْ علَمني فضران ربِّي والسه لاجي المحسوبي المَعْقلي الشَّهَابِ أَوَا تَلُوتَ السَظمَ والمعاني ينفعنا في يوم بعلا مَناص على النبي سيد للعربا وصاصفا مُلْكُ لَاهُل النبُوه وساصفا مُلْكُ لَاهُل المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ والتابعين النبُوه وماصفا مُلْكُ لَاهُل المُلْكِ والتابعين النبُوه والتابعين النبُوه وماصفا مُلْكُ لَاهُل المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ والتابعين النبُوه المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ والتابعين النبُوه المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ والتابعين النبُوه المُلْكِ وماصفا مُلْكُ لَاهُل المُلْكِ والمُلْكِ والتابعين النبُوه المُلْكِ والمُلْكِ والمَالِكِ والمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمِلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُونُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكُ وَالْمُلْكِ وَالْمُلْكُونُ وَالْمُلْكُ وَالْمُلْكُونُ وَالْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِونُ وَالْمُلْكِونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِونُ وَالْمُلْكُونُ ولْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكِونُ وَالْمُلْكُونُ وَالْمُلْكُونُ وَالْمُلْكُو

تمت الحاوية الفاخرة في علوم البحر الزاخرة . وصلَّ الله على سيدنا محمد وآله وصحبه وسلَّم . تمامها عشية الحميس ، وأربع ليال خلون من شهو الحج سنة احدى وتسعين سنة وألف سنة من الهجرة . هذا الكتاب للسيد . . [مطموس عمداً] . كتبه خلامه مأذ محمد بن راشد الفافري .

⁽١٠٥) * ب، ظ: للمضلات.

⁽۱۰۷) ، ب، ظ: ابلی .

⁽۱۰۸) ♦ ت: السمسكين، البديل من ب، ظ.

⁽١٠٩) ، ب، ظ: الملم.

[🐽] ب، ظ: المجرم .

⁽١١٠) ، ب ، ظ: اسال الرحمن .

⁽١١١) ، ب ، ظ : في العرض بالخلاص .

⁽١١٣) • ب، ظ: النبي وآله واهل العبا . (١١٣) ب، ظ: وصحبه الكرام والأنصار

التابعي رضي النبي المختار .

⁽۱۱٤) ، ب ، ظ : وما استوى .

فهرس الأماكن من بلدان وبنادر ومراسي وجزر ورؤوس وغبات وغيرها

(يحيل الرقم الاول الى الفصل والثاني الى رقم بيت الشعر فيه)

أَنْكَرُوانَ ٩٠:٩ الأباعل ٥: ٨٨ ، ٥: ٢٩ ، ٥: ٣٣ أَنْدَلُوسِ ٢:٩٤ াৰ:ৰ ক্ৰী أَتْلَمُنْك ١٧:٩ ، ٤٠:٨ الأثاف ٥:٧١ اُودِيُّ ٧:٨٥ الأَخْوَار ٥:٨٨، ٩:٧٥، ٩:٤٢ أَيْظُم ٧:٨٠ ١٨١٨ أَدُّوا (أَدُوا) ۲۲:۹، ۲۲۱،۹ أَرْضِ الْحَدِّ ٤:١٥) ٤:١٧ أَرْضِ مَلَاقَة ٢٠ ٢٩ البات ۱۱۶۰ ، ۱۹۰۰ ، ۲۱۰ ، ۲۲۱۰ البات أزْدَيْف (أزَادْيُوا) ٨:٨ ، ١٢:٩ 104:V بَابَ الْمُندم ٢٠:٥ الأسود ٥:٣١ الباضم ١٦:٥ الأطُوَاح ٤: ١٢٥ الناطئة ١٣٤:٤ الأكاتِم ٧:٧٧ تَأْتُدُ ٧٤٠٧ أُكُنَّى ١٠٥:٧ ، ١٠٥٠٧ النَّر ۱۰۲:۷ أُكْرُ اكُوري ٢٩:٦ ב רוצו ווור וודי דודי דוסד أُمُ الشُّيطَانَ ٥:٣٣ بَحْرِ أُوقانوس ٥:٧٤، ١٢٨:٥ أميني ٧:٧ بَحْر بَرْن ۲:۸۷ أنامل ١:٩٥ انْجَزْعُه ٥:٥٠١، ٩:٩٥ تُح الحَجَازِ ٥:٥٥ نَحْ الظُّهَارِ ٥: ٦٧ أَنْكَرَاقُورا ٣٦:٩ TER GG أَنْتُرُوْهِ ٧:٧٩، ٧:٢٩، ٧:١٠٤ ، ٧:٥٠١

بَنْدُر دَرُويش ٩:٩٥ مَنْذَرِ السُّلْطان (جَرُون) ٢:٥ بُنْدر شَاتِي جَام ٢:٨٤ بَنْلَر شَجَاجِي ٦٢:٩ بَنْلَرِ الشَّجَرَهُ ٥:٩٣ ، ٧٢:٩ بَنْدَر شِعْبَان ٦٦:٩ بَنْدَر الصين (زيتون) ٩٤:٦ بُنْلُر قَاسِم ١٨:٩ بَنْلُر کُوْرِی ۵: ۱۳۰ ، ۲۷:۹ نْتُر كُوْس ١٤٠:٧ ، ١٨:٩ ، ٢٨٠٩ ، ٢٢٢٩ بَنْدَر مُوسِيَ ٥:٨٤ بَحْدَر النُّوب ٢٢:٩ نَتْلُو هَلُودُه ٢٧:٩ نَّلَر هَنْت ١٩:٩ ئه ۱۰۸:۷ 17: V : 7: V : V : V : V يُزيًا A:۲ ، ۲:۸ تان ۷:۵۵، ۷:۷۵ بيْمَارُوه ٩:٨٥

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171:V . 177:V 180:V . VY:0 . N. بُرُّ بُرْبُرُهِ ۷۲:۰۷، ۷: بُرُّ الجُنْجُمَة ۱۷۰:۱۷۰ بُرُّ جَلْلَة ۸:۸، ۱:۸ بُرُّ الجَبْش ۹۳:۰ جُلَّة ٨:٨٤ ، ٨:٩٤ الزُّنْج ١٠٠٠، ٧٦:٩ العَرْب ٥:٨، ٨:١ ، ٢٩:٩ ، ٢٢:١٠ بَرُّ الغَرْب ٧٦:٩ بُرُّ قَارِس ۱:۲ قَدَح ۸:۲۵ ، ۸:۹۵ القُمْر ١٣٥:٧ كُوْلَمُ التَّمِيلُ ١٠٨:٧ مُكْرَان ٢:٧٧، ٧:١٧٥ 1V:9 . Y : A . TA:V - EI برنی ۷:۹ه، ۲۱:۹ עשור זייר אייר אייר איירי ١:٨ ، ٩٥:٧ المند ٢:٨٠ بُرُور الْكَانِم ١٣٩:٥ بروم ۷:۱۵۱ الله ۲:۷۷۱ نَلْدَة السُلْطَان (ساروه) ٩٨:٩ بَلَدُ القُلْزُم ٥٤:٥ نَلَدُ كُوْلِ ٢٠:٦ نُنجازم ۷:۵۰۷ بُنْجَالَة ٢:٨٤ النَّحَالَتَانَ ٦:٥٠، ٣:٨ شُجَالَة الأولى ٢:٣٤ بُنْلُرِ آلِيَهِ ١٤١:٧ بَنْدُر بَنِي إساعل ١٣٧:٧ ، ١٣٩ بُنْدَر تَلَّيني ١٩:٩ بَنْدُر جَاوَه ٢٦:٧ ، ٩:٩3

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εδρ²ρ³ Arietis

π Sgr

εξη Ursae Majoris

εξη Ursae Majoris

α Crucis, la Croix du sud

α Canis Majoris, Sirius

pednf Tauri, la Pléiade

α Ursae Minoris, Étoile polaire

 $\zeta \gamma \eta \alpha$ Leonis, le Front du Lion α Ursae Minoris, Étoile Polaire α Ursae Minoris, le Chevreau Mars

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⁽١) مثنى زبان ، والأصل والصحيح الزبانيان .

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| Mars | الْمَرْيْخِ ٤٤:١٤ ، ٢١:٣٤ ، ٤٩:١١ |
| Jupiter | المُشْتَرِي ۲۱:۱۱ ، ۴۸:۱۱ |
| α Centarui | المُشْقِلِ ع:٣٥ ، ع:٠١٠ ، ٩:٠٤ |
| γδ Pegasi | الْمُوْخُو (الفَرْغ) ١٤:٤ |
| γ Cephei | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| | 108:8 |
| γ Cephei | ميخُ الجَاه ٤٤٤٤ ، ٣٧: |
| γ Cephei | ميْخ الجَدي ٢٦:٤ |
| Libra | المَيْزَان (برج) ١٤٤٤٤ ، ٢٠:١١ ، ٢٠:١٢ |
| β Orionis | النَّاجِدُ ٢٠:٧ ، ٤:٥ |
| β Cassiopeiae | الْتُقَةِ ٢:٥١، ٢:٨٣، ٤:١١٩، ٥:٧٣، |
| | 0:Y3, 0:Y0, F:TT, V:°F, |
| | Y:YF , Y:00/ , Y:FY/ |
| € Cancri | النُّــْثَرُة (منزل) ٣:٢، ١١:٤، ٨١٤٤ |
| | 3:77/ |
| φedηf Tauri | النُّجُم (النُّرَيَّا) ١٦:٢، ١٧:٣، ١٢٦:٤، |
| | 0:7A . V: A . V:70/ . V:7// |
| α Ursae Minoris | نَجْم الجَاه ٢٣:٤ |
| α Ursae Minoris | نَجْم القُطْبِ ٣٤:٤ |
| βηγδε Virginis | تُجُوم المَوَّا ٤:٤ |
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| α Lyrae, Véga | نَجْم النُّسْر ٤: ١٠٠ |
| α Lyrae | السُّشْرِ عُ:١٠٣، ١٠٨:٤، ١١٣٠، |
| | F:YP , Y:Y31 , Y:001 , *1:YY , |
| | 77:10 , 70:10 , 78:10 |
| α Aquilae + α Lyrae, | التُسرّان ٤: ٧٠ |
| α Aquilae, l'Aigle Volant | النُّسْرُ الطَّائرِ ١٤:٥، ١٤:٠ ، ١٧:٦، |
| 0. 4 | 18*:V |
| αβγ Arietis | النَّطْح (منزل) ٢:٨ |
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| γδεησφτζ Sagittarii, les Autruches | النَّعَاثم (منزل) ٧:٢ |
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| αβγδεζη Ursae Majoris | النَّعْشُ ٢٠٢٧، ٢٠٢٢، ٣٩:٢ ، ٢٠٢٥ |
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| | V: 151 : P: 10 : P: 00 : P: 50 : |
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| • | V:101 : 1:37 : 11:00 |
| ∼ Lyrae, Véga | الرَّاقِم ٢: ٤١ ، ٤: ٧ ، ٤: ٥٠٥ ، ١٠٩: ٨ |

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الفصال الشانسي

| في المنازل والاخنان والجري عليهم ومقابلاتهم وعدد اصابعهم في السهاء وهي اصابع |
|--|
| غير الترفّات ومعرفة الترفّا وما يتعلق بذلك والله اعلم . |
| ٨_منازل القمر الشامية |
| ٩ ـ منازل القمر البيانية |
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| القصسل الشائست |
| في قواعد الباشيات ومعرفة النيروز العربي والسلطاني والسنين العربية والرومية |
| والقبطية والفارسية واستخراجهم بما وافق الحساب وطالع الفجر وغاربه على حساب |
| |
| النيروز . |
| ١٧ ــ دوام القياس سنة أشهر |
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الفصسل الرابسع

| في معرفة الباشيات ومواسمها وشهورها وثبوت قياسها وزواله على حساب النيروز |
|---|
| وذكر ما يتعلق بصعود الجاه ونزوله وصعود الفراقد ونزولها وما يتعلق بذلك . |
| ٢٢ ـ القياس الأصلي |
| ۲۳ ـ قياس الواقع والتير |
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القصل الخامسين في معرفة دير بر العرب والحجاز والسيار والخليج الربري والسيمال والربم والزنج

| وجزائر القمر وآخر بر السودان والكانم فيها صح به الحساب والتاريخ. |
|--|
| ٣٨ ـ الديرة من جرون الى باب المندب |
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| ٤١ ـ ديرة بر بربرة |
| ٤٧ ــ ديرة مل بر الزنج |
| ٤٣ ــ ديرة جزيرة القمر والجزر المجاورة لها |
| الفصـــل السـادس |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور ، مما صحت عنه الاخبار . |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور، مما صحت عنه الاخبار. 23 ـ دير بر العجم |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور ، بما صحت عنه الاخبار . \$3 - دير بر العجم |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور ، مما صحت عنه الاخبار |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كليطون والمهراج والصين والغور ، مما صحت عنه الاخبار |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور ، عما صحت عنه الاخبار . 33 - دير بر العجم |
| في معرفة دير بر العجم والهند والشوليان والنات والبنج والسيام الى تحت الريح كبليطون والمهراج والصين والغور ، مما صحت عنه الاخبار |

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|---------|------|--------|-------|--------|--------|------|-------|-------|---------------|--------|--------|-----|---------|----|
| الاخبار | عنه | صحت | le | بذلك | يتعلق | وما | بينهم | وما | ئران | خ ومک | لاطواح | وا | لسومال | وا |
| | | | | | | | | سواب | با ل م | اعلم | والله | | لتواريخ | وا |

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|----|--|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|--|--|--|---|---|---|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|
| ٥٣ | | | | | | | • | | | | | | | | | | | ۰ | | | | | | | | | | | ٠., | ور | یه | زة | نزا | - | ير | . د | - 1 | 0 | ۲ |
| ٥٣ | | | | | | | | | | | ۰ | | , | | | | | | | | | | | | | | ٠. | | ٤ | من | ند | ر ا | نز | ÷ | ير | . د | - 1 | ٥١ | ŕ |
| ٤٥ | | | | | | ٠ | ۰ | | | | | | | | ٠ | | | | | | | | | | ٠ | | | | | ٠, | نزا | Ļ | ١, | الق | طا | Α, | - 1 | ٥ | ٤ |
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| 7 | | | ٠ | | | ٠ | | | | | | | | | | | | | | | | • | ٠ | | á | بيأ | i | إذ | g | ال | لف | را | زر | ÷ | ير | . د | - 1 | ٥. | ٦ |
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| ۲١ | | | | | | | | | | | | | | | | | | | | | | | | | | | ī | _ | _ | _ | Li | | | :1 | ماا | | | ۵ | 9 |

الفصسل الشامس

في معرفة المسافات من بر العرب الى بر الهند من جاه خمس الى جاه اثنتي عشرة وذكر المسافات على اربعة رؤوس ، وذكر أزوامهم وما يتعلق بذلك وهم قيد يعتلم بهم مسافات جميع البحر . والله أعلم بالصواب .

| 77 | , | • | • | , | U | ı, | į. | جا | - (| لى | 1 | رة | <u></u> | 2 | (| 5. | عد | _ | ا ا | با | - | ئ | A | لمند | 1 | يبر | , | زمي | لم | ١, | بر | ین | ت | فار | سا | 71 | - | ٦ | ۰ |
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| 1 2 | | | | | | | | | | | | | | | | | | | | | | | (| سياه | JI | بر | e | ت | لنا | ١ | بر | ین | ت | فار | L | ŢI | - | ٦ | ١ |
| ٦0 | ٠. | | | | | | | | | | | | | | | | | | | i | ر أ | عث | 6 | ىدى | _ | ١. | جا | . ر | وس | ؤ. | , ر | على | ت | فاد | L | JI | _ | ٦ | ١ |

| ٦٤ _ المسافات على رؤوس جاه اصبع |
|--|
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| ٦٦ _ استخراج مسافات جميع البحر |
| |
| الفصل التاسيع |
| في معرفة قياس الجاه والفرقد والنعش عند استقلال الصرفة ، وهو قياس الاصل على |
| جميع الرؤوس المشهورة في سواحل البحر المحيط الواغل في الشهال ، وهو بحر الهند |
| والسيام وبر العرب والسواحل. والله اعلم بالصواب. |
| |
| ٦٧ ـ قياس الجاه من ارتفاع احدى عشرة اصبعا الى ارتفاع اصبع |
| ٦٨ ـ قياس الفرقدين من ارتفاع سبع اصابع الى ارتفاع اصبع ٧١ |
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| القعبل العاشيير |
| في معرفة تغني عن الاستواءات وقطع الازوام وذكر ما يتعلق بالربان ، كتفصيل القلع |
| ومعرفة جري الماء في الباحة والبحر المحيط الواغل بين بر السودان والهند والصين . |
| والله اعلم بالصواب . |
| |
| ٧٠_ آفات الترينة |
| ٧١ ـ معرفة تغني عن الاستواءات وقطع الازوام |
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الفصل الحادي عشسر

في تقويم يعرف به الساعات ودخولها والسبعة السيارة وازوام الجمة والنجوم والشمس والقمر ومعرفة النجم الزوجي ودخوله الاخنان ودليل الطوفان وتاريخ الأرجوزة بما يوافق ذلك من الحساب . والله اعلم بالصواب .

| ۸١. | ٧٤ ـ معرفة المنازل الطالعة والآفلة |
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| ۸۲. | ٧٥ ـ معرفة بروج المنازل |
| ۸۳ | ٧٦ ـ معرفة الساعات |
| ٨٤ | ٧٧ ـ معرفة النجم الزوجي |
| ۸٥. | ٧٨ ــ معرفة اشاير الطوفان |
| ۸٦. | ٧٩ ـ الخاتمة وتاريخ الارجوزة وعدد ابياتها وأبيات فصولها |
| ۸۸ . | ۸۰_مؤلف الحاوية |
| ۸٩ | فهرس الاماكن من بلدان وبنادر ومراسي وجزر ورؤوس وغبات وغيرها |
| 97 | نهرس البروج والمنازل والنجوم والكواكب |
| • 0 | تهرس المواد |



- 105. This poem needs an expert scientist who discovers the errors, this is the only weak side in it.
- 106. If you find any divergence or fault, my Creator alone is Perfect, May He be magnified and honored.

80. [The author of the Compendium]

- 107. I composed this poem with intense assiduity, thanks to God and to my teacher,
- 108. I, the poor, the weak, who aspire to the divine indulgence and seek refuge in God.
- 109. 'Ahmad Ibn Māğid al-šihāb, al Ma'qilī, the well known.
- 110. I beg you, in the name of God, my assistant, in case you read my poem and understand its meaning,
- 111. to thank God sincerely for me, this will help me on the day of my death.
- Every time the east wind blows, may God bless the Prophet, Master of the true Arabs,
- 113. his noble and generous family and his companions and his intelligent followers.
- 114. May He do it as long as a pilot travels at night on his ship, and as long as the supreme power lasts in the hands of the sovereign.
- 115. This is the end of my poem in Rağaz. I began it by thanking God. So I finish it.

This is the end of the excellent compendium which deals with the rich sciences of the sea. May God blessing and peace be with our lord Mohammed, his family and his companions. This copy was finished on the eve of thursday, on the 4^a of the month Du l-Ḥiġǧa of the year 1091 H. This book belong to ... (crased)...It was written by the servitor of God Mulla Mohammed Ibn Rāšid al-Gafarī.

- 111"- -86-

- I have finsished it in the month of Du-I-Higga, at Julfar, the residence of the Lions of the sea among other countries.
- on the day of the most blessful holiday, since it is devoted to charity and fast.
- The date was, my master, 866 H. (sixty six and eight hundreds).
- I named it « the Compendium », my friend; it enlightens the ignorant like a lamp.
- I would not be responsible for the mistakes of any copyist or any reader, after my death.
- I read it to the grammarians and to the Arabian traditionalists.
- The Rutters do not contain any subjects not equalized in lucidity and explanation
- by some condensed little citations of my own clear ideas about the principles of mastership in navigation.
- If the expert scientist see it, consider its first and last parts,
- and observe its chapters and computations, he shall certainly implore the mercy of God for the composer of these verses.
- 95. The total number of its verses is one thousand eighty two in all
- The poem is divided into twelve chapters, my friend, count them, then listen and see
- 97. The first chapter counts fifty five verses.
- The second chapter has sixty; the third forty, young mun.
- The fourth chapter has 170. Transcribe for the fifth chapter
- 100. one hundred and thirty three verses; for the sixth chapter one hundred and seven.101. The seventh chapter is long and contains 185 verses
- The seventh chapter is long and contains 185 verses exactly.
- 102. The eighth chapter has about seventy; the ninth, seventy precisely
- 103. with eight others. The tenth, counted directly, gives seventy.
- 104. The last chapter, the eleventh, has 115.

EPILOGUE

79, the poem's date and number of verses, number of verses of each chapter]

- 74. If I intended to prolong every art, the copyists wouldn't be able to reproduce my works.
- 75. But I aspired to expose the basic elements of the sciences of the sea. I never aimed to joke and to compose too much poetry.
- I spent my life reading and asking a lot of questions everywhere.
- How often I referred to the Chaula's manuscripts, written in poetry and prose, and to their chapters.
- 78. How many times I had recourse to the Arab calculation and to the Indian Computation since I was young!
- I didn't see in the knowledge of the originals anything correctly copied about Qumr and Zang,
- nor a learning proved to be really true, about China and Southern java.
- 81. In fact, the mind never accepted to be enslaved and never admitted to entrust the pages of a book and a parchment.
- That is why I abridged my poem and developped freely in it the true science.
- which I included in my Poem in Rağaz. Nobody but me could compose such a poesy.
- 84. That poesy seems like a shining fire flamme. May you die, my rival, in your anguish or in your fury.

-110-

- 71. If you see the lightning on the surface of the sea, the weather will resemble that of the setting of the Pleiades:
- in some places, the wind blows; in others it does not.
 Comprehend me and understand.
- This agrees with the astronomical calculations, among all what has been said, my friends.

-117-

77. [On the binary star]

- Whoever likes to know the entrance of the binary star in the rhumbs and its departure,
- should know that the binary star circles the rhumbs every month. Comprehend what I explain.
- 54. It comes back to the rhumb in every month three days for ever.
- 55. The ones and fives in the binary are for the Flying Eagle.
- The fours and twos for the Heart when rising or setting, my friend.
- 57. The threes and sevens for the poles, my trusty.
- 58. The six and eights for Capella. The nines for the culminating star, take my explanation.
- 59. The last tens for the Earth; some said it is in the nines.
- Be careful and mind the friends, and advise them, so that you get your reward in heaven.

78. [Signs of the heavy rains]

- Everybody should obey the orders of the pilot, my courageous,
- especially when appear the heavy rains signs, noticed in due time.
- 63. For example, if the dirts obscure the sun or the moon shine, be very careful!
- 64. If the dirts last three days,
- 65. without any clearing up in the morning and the evening; if the heat, the rain and the clouds stand firm;
- if the sea is agitated, and if you see the crab; then turn back your ship without delay,
- 67. and go steadily to the nearest harbor. May God protect you from all dangers!
- 68. If you see the dirt in the afternoon, that means the beginning of the wind blowing according to the experienced sailors.
- If you hear the thunder, and see the rain falling not in big drops, but in thin and tenuous shower,
- if you see the lightning very high, then the wind will blow without fail.

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- from the beginning of the month till the middle of it, know on how many hours you should travel,
- and for the other half of the month, at what hour it rises.
 Multiply the result
- by six and divide by seven. For example, it is the seventh of the month.
- 34. Multiply by six, you obtain forty two.
- To have the hours, divide by seven and you obtain six hours.
- This is midnight, without discussion, because the night is twelve hours.
- 37. Do the same from the middle of the month till its end, and calculate the rising of the moon in all times.
- If you like to compute on the basis of the rising, culminating or setting mansions,
- multiply and divide as in the case of the moon. If the division does not give an exact number of sevens,
- the remainder constitutes a seventh of anhour, since the hour is divided in seven parts.
- Comprehend that these hours constitute, according to scientists, the coming time.
- They correspond to the seven planets: Mercury, the Moon,
- 43. Saturn, Jupeter, Mars, the Sun and Venus.
- 44. They are seven and have seven letters and the beginning is on sunday. Know that.
- Deyhul Sarh, night, and day. This is the explanation of Dayhul.
- 46. They are two words of seven letters, which represent what has been said, my good man.
- The first letter is the last letter of the name of the planet.
 for Mercury. Discern and calculate.
- for Jupiter; for Venus; J for Saturn; و 48. ي for Jupiter; for Venus
- 49. J for the moon; to for Mars, the horse of the sphere without any doubt
- To mercury the beginning of the night, repetedly; and the comes in the first day,
- I mean sunday the beginning of the calendar. The last letter for the beginning of the night.

- 13. In every year there is a quarter of a day, since the Emigration of the Guide of Humanity.
- 14. In the bissextile (leap) year, the theorists consider the difference a trifling one; this is what they said.15. I composed it since my description was diffused among
- all people. And a rider doesn't leave his horse.
- The best division of the open sea is that of the mervelous seven stars of the Little Bear.
- I left them because I could not observe them all the time.
 Comprehend their default.

75. [On the mansions' signs of the Zodinc]

- The mansions I described to you meet the twelve signs of the Zodiac in the celestial sphere.
- 19. Every sign has two mansions and a third in all.
- The beginning of the Twin's Feet mansion is in the Crab Sign; the beginning of the Faint Stars mansion is in the Balance Sign.
- Be informed that the sun and the Moon pass through the signs of the zodiac.
- If you like to know the signs, add to the actual date of the famous Nuruz
- sixty days. And count the divisions from the Balance Sign. Take
- exactly one month for each sign. The sun is situated in the last sign of your calculation.
- 25. When you know the position of the Sun, compute the position of the moon. Add five to the date
- of the arabic month. And do the same and divide by five for each sign of the zodiac. Comprehend that.
- The counting begins from the above mentionned sign of the sun.
- The Moon reaches the last sign. If you like to know the position of the moon in the mansion,
- add half three to the past date of the month and count from the mansion rising at dawn.

76. [On the Hours]

 If you like to know the hours on the basis of the rising and setting of the moon,

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Chapter XI

A calendar that gives the hours and their beginning, the seven planets, the zams in the open sea, the stars, the sun, the moon, the binary star and its passage by the rhumba, the signs of the heavy rains, the date of the poem in accordance with the astronomic calculations. God know the truth.

74. [On the rising and setting manalous]

- Whoever would like to know the Zam and the correct division of the open sea,
- 2. should watch the rising mansions and the setting ones.
- Each mansion and one sixth of a mansion equal one hour for the moon at night, and for the sun as well in the day.
- Every three mansions and a half are equal to one zam.
- First, begin by the Nuruz, so you might know the signs of the Zodiac exactly.
- 6. Take the time gone by, and add seventy eight to it.
- Give thirteen days for each mansion and count my friend, from the Lion's Neck mansion.
- This calculation will give exactly the rising mansion at dawn.
- The sun is situated in the third mansion, I mean the mansion rising at dawn, oh inquirer.
- The month ends in the forth mansion, if it is complete.
 Do like that and apply it.
- In case you want the dawn, calculate in which sign of the Zodiac the sun and the moon are situated.
- But the year I explained to you is a leap one, known by the astronomers.

73. [On the knowledge of the currents of the water in the high sea]

- 65. Be moderate when you ask for your preparatives. Relieve your crew when tacking.
- If you desire to know the currents of the water in the high sea,
- these currents drift you to the south pole from 100 to 300 of the Nuruz,
- 68. and from 300 to Tirima; then it stops in the north, for days
- 69. whose number is ten in that period and in the 300. Know
- Those are the descriptions of the sea. At the littoral, there are currents (hāyāt) or tideways of the waters.

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- 47. and with three stitches in the aft depth; then seam duly the rope of the sail's foredepth;
- 48. attach the ring with four stitches, putting three of them in the hem. Sew perfectly.
- They call them the dawāsiğ ropes and they extend them by a wood.
- Fold the edge of the cloth over the rope, and put a boltrope at its extremity.
- Sew the edge to the boltrope, and be careful after the following computation I am giving you.
- The sail width is equal to the length of the yard; its depth to the height of the mast supporting the yard.
- The foredepth of the sail is a little less than a quarter of its abaft depth. Take my descriptions, and listen to my computation.
- Sling the foredepth and the sail rope half of ten [units] apart, understand, o brother.
- 55. The foot hem of the sail should be clearly the third of its head doubled rim.
- 56. The aftdepth hem of the sail should equal half its foredepth doubled rim, and some expert pilots said two thirds.
- The foredepth depends upon the measures taken and some pilots increase it, my friends,
- by two thirds of a finger for every « ell ». Stitch the middles. View closely
- 59. the torn and unsewed parts, the aftdepth of the sail, the tacking ring; and sew them hastily.
- This is the tailoring of the sail among the Gawšak and the Arabs, my friend.
- But the chinese, the francs and the indians have their own different purpose.
- Some of them increase the aftdepth. Some others avoid giving any information.
- The sail appear square when looked at; and it intends to catch the winds.
- 64. But the safe conduct depends upon the master of a drifting ship because of bad winds.

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- Measure it in a normal way, its maximum elevation is famous among all pilots.
- 31. its « shallowing » and « deepening », o friend, have an example, when you are sailing
- 32. from India to Arabia, and the measure of these stars increases. Then calculate
- a quarter of a finger and know that you sailed ten zams exactly.
- If your course is by at-Tā'r, discern my computation and understand my meanings.
- 35. The elevation of the « Asses » is five fingers at Polaris eleven fingers and they say the elevation of the « Square » is four fingers.
- Measure Sahm al-Qaws and Canopus four fingers at al-Hadd, my friend.
- 37 Diminish the fundamental measure as much as they increase.

72. [Tailoring the ship's sail]

- If you desire to tailor a sail, draw the ship to an even ground.
- Implant four stakes separated according to the traditional measurement.
- Spread the bolt-ropes and the cloths. Order the seamster to stitch them
- When the seaming is finished after making the adequate measurement, put two yards by the width of the sail at the edge,
- along the bolt-ropes at the head and foot of the sail, so that these bolt-ropes might be fully stretched by pulling out.
- 43. Once the yards in place and before anything else is done,
- 44. sting the threads just at the rim, in equal intervals all along the line; then tie the knots strongly (round the yard).
- 45. Sew the boltropes of the head and foot of the sail, o brother, fasten the hem, without discussion,
- 46. with two stitches in the foredepth out of five stitches without lie

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- by the tablet of twelve fingers, when they are in the angle of the bar,
- measure them, and measure at the stern of the ship another star. Inscribe and keep sailing. Write down
- the decrease of the altitude of the stern star. As to the two stars measure, it changes not and the stars leave not their place.
- Whenever the little star of the stern descends one finger, verify it o traveller.
- 14. because your ship sailed eight zams exactly, not less.
- The two stars whose elevation you fixed in the angle, stay the same, understand my recommendation.
- 16. It has six successive rhumbs till that of at-Ţā'ir. Apply it:
- This suffices you throughout the sea, if you are courageous and have deep thinking.
- 18. The proof for that is that Polaris, listen to me, decreases 8 zams for each finger.
- But opposite the star Polaris, there is another star above the head, o brother.
- These stars are above the level of the water. Verify, you shall judge in the right way.
- Sirius and Vega in Arabia are correct from Mâmī to al-Hadd.
- All other culminating stars? are defective because of the pilots interpretation.
- Be known that Sirius, Pollux and Castor, Vega circle together in their motion.
- When Sirius sets at al-Hadd, the measure of Vega, Castor and Pollux, in my opinion,
- is nine fingers. Castor and Pollux are at its western side, and so is Vega, intelligent pilot.
- 26. Whenever Polaris decreases one finger, diminish Vega a quarter of a finger.27. But Castor and Pollux decrease in the two coasts half a
- finger by sight.

 28 At Začad if you measure Sirius at the rising of the
- At Zağad, if you measure Sirius at the rising of the famous Vega,
- you obtain 5 fingers and Castor and Pollux 12 fingers but decrease half a finger in each tiriffa clearly.

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Chapter X

On a Knowledge that exempts from Knowing the horizontalities and from calculating the sailing distances in zams; citing requirements of the pilot, such as the tailoring of the sail, the navigation in the high sens and the Ocean extending between the Sudan coast, India and China. God know the truth.

70. [Defects of the Mastership]

- The pilots tested the horizontalities, but the scribes altered them.
- and impaired imperfections to the mastership since the time of Alexander till now.
- The drunk pilot writes on the science of the sea without proof and verification.
- 4. My life allow me not to experiment all these arts.
- I put not in my poem any science without knowing experiment.
- But I mention things which are obviously known and used by all pilots

(Knowledge which dispenses from using horizontalities and sailing by the zams)

- Measure Polaris and the Guards. When they set the Great Bear is at your disposal.
- O mariner, compute the sailing distances and the courses, and travel your zams accordingly.
- In case you see two stars culminating, leave not the computation of the measurement,

- 3 fingers in them all; and so it is at Tīrī Rağa which is the most famous islands for rescue.
- At Hadūda it is 2 fingers; so it is at Timāruwa, may God protect you from the separation.
- At Kūs harbor, the deep of Kūrī, aš-Šağara famous harbor,
- the Great Bear was measured one finger by the scientists. They see nothing else, understand.
- 74. If you measure at the end of ad-Dāmūtī by the Great Bear before it is late,
- you obtain half a finger for the al-'Anāq (Mizar) and al-Ğun (Alioth). Canopus is not setting and fixed.
- because this is in the end of az-Zang Coast and the strait leading to the West and to al-Ifrang country.
- At its southern end, there is nothing but reefs and obscurity known by God
- 78. Some pilots say those are islands and the end of the littoral is five fingers by the Great Bear, o accustomed to the sea.
- The reports of the pilots are different. May God forgive me my faults.

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- 50. At Sarbaya, Fālī island, Java, Manfiya in the sand,
- the Great Bear is 12 fingers, it is proved. Understand my poesy which is like jewels.
- 52. At al-Harraba', Hūriya, al-Milh's head also, o inquirer,
- at Fäyden Šäši Timor, some pilots say at Kilwa, o erudite,
- 54. at 'Angazīga, Hanzuwānī, Mulālī and Dumūnī islands,
- 55. the Great Bear is in them all 11 fingers. Here at the end of al-Fal, in the opinion of all pilots,
- at Timor islands, and, in the opinion of al-Qumr pilots,
 at Bani Ismail harbor, the Great Bear is 10 fingers.
- 57. So it is at Lûlûğân, al-'Ahwār, and at Sufăla as was reported, o master of the sea.
- 58. The Great Bear is nine fingers at the residence of as-Sultan whose name is Bimāruwa from a long time.
- At its west side, you see 'Anämil, and Darwis's harbor on the littoral.
- They said at Manzalāği and Sa'da, the Great Bear increases a little bit more than they explained.
- The Great Bear is 8 fingers, in the opinion of all pilots, at al-Anbar island;
- at Šagagi harbor, Musanbigi, an-Nuwab harbor, listen to my discourse.
- If you measure al-Gun (Alioth) and as-Suha (Alcor), when the Tail of the Lion is culminating, you obtain seven fingers,
- 64. at Nasīm, Malawin and the end of al-'Ahwar exactly.
- 65. The Great Bear is six at Sufăla, the country of Gold, this is my knowledge.
- The Great Bear is also six at Ši'bān's harbor and at Mankār, o faithful friend.
- The Great Bear is five fingers at Haduda harbor and Kuri harbor.
- It is four fingers at Kūs, Qāsim and Kandalī harbors, in the opinion of the erudite.
- It is at the harbors of Hant, Tallini, and 'Abya in al-Qumr, o helper.

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- It is reported that at Aruwa, Malacca and at the end of Barni, in the opinion of the clever pilot,
- it is reported that at 'Adwa, Maqāṣir, I mean at its northern end, pretend not,
- and at Barhala, Šanfā, Singāfūr, Fiššalam, understand me, o expert pilot,
- at Salt Zanğī, Manqābuwa and Barāwa, the Guards are truly five fingers.
- Measure the Guards when they are in horizontality four fingers at Malawan, it is a sure measurement.
- At Falī Banğ and Andarfüra, the Guards are four fingers, it is known among all pilots.
- At that time, you see, o pilot, that, the mansion of the Lion's Tail might be culminating
- in the fundamental sphere as every star when the north pole is at the level of the sea.
- (added) Don't you see that aṭ-Ṭā'ir stays in the south, then culminates
- in the middle of the heavens. Be informed, and its signs are al-Ma^cqil and ad-Dalim.
- In the region around az-Zang, it is septentrional. My description is enough to you, take my word.
- Then toward the north, o intelligent pilot, the best star is Polaris.
- 43. But at Kitāwa, Sunda Bārī, Andalūs, Mūsa Bārī,
- and Mulükû, measure the Guards three fingers, it was tested by the pilot used to go to these places.
- 45. It was reported that Mulūkū was not in that place, understand my poesy and keep it unaltered.
- 46. The Guards at Monbasa and Zarrin which is far 60 zams in the high sea, are two fingers, be informed.
- At southern Java it was reported, at Läsam, southern Maqäsar
- Ğaršīk, Java, al-Ḥadrā' whose name is mentioned, after Qārī,
- at Karam Diwa, Java Harbor, the Guards are one finger, learn the saying.

- But at 'Azādiwa, Polaris is six fingers. At Marṭabān, Mutbalī, Šihr.
- and also at the well known ras al-hullab, Polaris is six fingers in excess.
- If the Lion's Tail is in horizontality, Polaris is five fingers, understand my description.
- in the following heads, my lion: Dubāb, Dār Zayna, and Māmī,
- Mangalore, Ra's al-Fâl, I mean the northern end of these islands,
- also the coast of an-Nāt, Şadrāfattan, Andamand and Fālī, be meticulous,
- Šahr-i-Naw, and Barnī Islands-I mean its end from the north,
- if you come to them from the north, my love, the Nebulae of the South Pole will appear.
- At Tanāṣarī, Polaris is four fingers. Tirmulā Wāṣil, Andarawān.
- 21. Qābuqāt, Ğardafün resemble exactly these heads.
- 22. At Al-Marr, Šankal, Nāgafattan, Nākabārī,
- also Murāšī, the end of Seylān, then Qarāyā where is the pilot meeting,
- and Kušī, Polaris is three fingers exactly. So you might be saved
- Also At Takwa, Manğal Füla and Fānuwa in the opinion of all pilots,
- Polaris is two fingers, O protector; at Šitalākam, Qāyil, al-Hirr, Kūlam Malī,
- Ğämis Fula and Qadaḥ, when they appear, at as-Sif and Seylān, Polaris is one finger only.

[The measurements of the Guards from altitude seven fingers to altitude one linger]

- 28. But for Talang, Dang Dang, Sumutra, Mahkufang,
- the shoal of Muqbil off the country of az-Zanğ, measure the Guards seven fingers and rely on it.
- The Guards are six fingers at al-Murût, and at Fanşûr also, take my advise.

Chapter IX

The Knowledge of the Measurement of Polaris, the Guards and the Great Bear, when β Leonis (Denebola) is culminasting. It is called the fundamental measurement on all famous heads of the coasts of the Ocean extending to the morth and known as the sea of India Slaus, Arabia and as-Sawishi. God know the truth.

67. [The measurements of Polaris from altitude 11 fingers to altitude 1 finger]

- The measurement of Polaris is taken, o polite, I mean its tested fundamental measurement,

 when the Lion's Toil (Denebola) subminetes above the
- when the Lion's Tail (Denebola) culminates above the head and the Guards are in horizontality.
- At Ğudda, al-Ḥadd, the pilots say at Zağad also, and at both the two Benğalas.
- Polaris is 11 fingers, without lie, test it, o pilots of experiences.
- At Rakanğ and the famous Ğiğahr, at Diu, al-Maḥram and Masira.
- Polaris height is ten fingers. At M\u00fcm and Kan\u00e4rkam, Polaris is 9 fingers. So it is at T\u00e4na, Madraka
- and Marābiţ al-Ḥayl. But in Samar islands, at Ḥamḍa's head.
- at Şawqira and Būriya, my friend, listen to my discourse, you get the suitable measure,
- Polaris is 8 fingers clearly. So Polaris is at Waysa and Satwāhī.
- But at Nağirâsı, Ğodâwarı and Dandabâsı, Polaris is seven fingers. At Sağir.
- the islands and al-Harda, Polaris is seven fingers measured and some pilots say seven in excess.

64. [Salling Distances at Heads, Polaris one finger]

- But from as Sif to Kandikal, I mean at Polaris one finger, my hope.
- the sailing distance is 95 zams, take it and leave any other distance.
- 53. From kandikal to Sarandib, add, o learned, to 20 zams
- 12 zams, it was said by the pilot who sailed it; other pilots gave a different number and put it in writing.
- 55. because its surface is big, so they have many calculations
- From the land of Qadaḥ to al-Fāl as-Siam, follow my discourse.
- I mean Ğāmis Fula, the distance is 20 Zams, even more, my courageous pilot.
- 58. From Ğāmis fula to Tütāğām 72 zams.
- From the land of Qadaḥ to as-Sīf at-Ṭawīl, understand my explanation,
- 60. there are 113 zams in the clear famous computation

65. [Sailing Distances at heads, Guards one finger]

- From the al-hadrā' island to Karam diwa, listen to my information.
- there are no less than 150 zams, even more according to another calculation.
- From Karam diwa to Sunda in Java, they counted 130 zams
- Therefore, between the two islands of Java and al-Hadra', we determine
- 65. 300 zams less twenty zams in this case, in the opinion of the good pilot.

66. [Computation of all sailing distances of the sen]

- I related the sailing distances from Polaris eleven fingers to Guards one finger.
- If the intelligent expert pilot and the proficient in mastership consider these distances.
- 68. he may compute the sailing distances of all places in the sea. Every pilot need to do it in his life.
- if it is not an unknown distance in islands limited in number and lost in the sea.

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- because they are the basic heads in the opinion of all pilots using astronomy in their navigation.
- The sailing distance between Dawä'ir's head and al-Qahhaz is 12 zams by suitable swift wind.
- There are 95 zams from al Qaḥḥāz to al-Ḥadd's Head, in my opinion.
- 33. 40 zams exactly separate al-Hadd's head from Zagad.
- There are 20 zams between Cambaya and that head, forget not.
- 35. 25 zams separate Kanfār from Šātiğām.
- 36. From Dawā'ir's head to Šātiğām, be careful, young pilot,
- the distance is 290 zams to which should be added two other zams to obtain the right number.
- No exact distances for China and al-Maghreb could be found.
- Nor two pilots agreed on and verified the sailing distances of al-Oumr.

63. [Sailing Distances at heads of Polaris five fingers]

- Between Tawähi and the islands, I mean Andamand, the isles of the sea.
- 41. there are 32 Zams; from Şadrāfattan to these Islands,52 zams in my opinion:
- 42. from Şadrāfattan to Mangalore, o omar,
- there are 30 zams, it was reported, doubt not and be not a coward.
- The ancient pilots said: the sailing distance from Mangalore to the Maldives is 20 zams;
- Between the Maldives and Māmī's head, there are 72 zams, take my word.
- From Socotora to Dubāb, according to the intelligent pilots in the computation of the sailing directions,
- 47. there are 60 zams, and there is another calculation which can be judged by the worst pilot.
- The land of Ğamla is separated from Dubāb by 8 zams, understand my explanation.
- From Polaris 5 fingers at Tawāhī to the land of Ğamla, I mean Hāhī
- 50. we count 260 zams and add to them four other zams.

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- No doubt that 20 zams separate the head of Fal from Malabarat
- and 72 zams separates the head of al-Fal from Māmi's head. Take my word.
- Some pilots say: the zams are 60, and prove it by the bearings of Sirius and Vega calculation.
- 16. When you go south, notable pilot, you add 8 zams
- 17. for each finger, o master; you are safe in both computa-

61. [Sailing distances between the Nat Coast and that of Siam]

- The sailing direction to Siam for the ship navigating in the open sea, is by Canopus
- till its end at five fingers and a half of the Guards. This is my description.
- Also the sailing direction of the Coast of an-Nāt is by the setting of Canopus. Understand my interpretation.
- 21. There are twenty two zams between the two coasts of an-Nāt and siam. Compute the other distances in zams by the following rule:
- Between Šātigām and Kunfār, I repeated it many times in my poetry,
- 23. if you go south, whenever Polaris decreases one finger,
- 24. that your sailing distance increases by eight zams exactly.
- which should be added steadily to the initial number between the Eastern coast and an-nāt.
- The sailing distance between Gamus Fula and the Maldive Islands is 100 zams complete and exact.
- You might find another distance, but this is the best computation.

62. [Sulling Distances at heads Polaris eleven fingers]

- Henceforth, I abridged the sailing distances and put them in verses in the poem al-Hāwiya.
- for the heads: Polaris eleven fingers, five fingers and one finger, and the Guards one finger. Here they are. Listen to me.

Chapter VIII

The Knowledge of the salling Distances between the const of Arabia and the coast of India, from Polaris 5 fingers to Polaris 11 fingers.

Distances in Zams at four heads and the related informations, that are the basic of all distances in the sea. God know the truth.

60. [Saiting Distances between the coast of Arabia and the coast of India from Polaris 11 flugers to Polaris five fingers]

- The sailing distance between the coast of India and that
 of Arabia is in my opinion,
- and according to all other pilots, forty zams from Zağad to al-Hadd, o intelligent pilot.
- The sailing distance between Maskat and as-Sind, is the same, and was verified by wise calculation.
- 52 zams separate Midwar's head and Halaf, in this description.
- 5. Dahrāwi and Madraka are 68 zams apart, o blessed pilot.
- 6. Sawqira's head is 80 zams far from Būriā, discuss not.
- The experienced pilot gives 92 zams for the distance between Dandabāšī and Sāğir.
- Know that the distance is 108 1/2 zams between 'Azdiv and aš-Šiḥr.
- The sailing distance between Mangalore and the mountain of the Famous Där zina
- 10. is 130 zams as it results of my perfect calculation.
- 11. Dăr Zina and Mămi, in the reported calculation,
- are separated by 37 zams and a half. This is my description.

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- By the setting of Scorpion, o brother, is an experienced course to Arāba;
- 182. The pole, o pilot, to Suwayq; the Sillibar to the isles, it is verified. I mean
- 183. by its rising; to Masqat by Canopus; also Qalhāt by this bearing.
- 184. By Centaurus al-Hadd is attained. Listen to my words, understand, you will be guided.
- 185. These are exactly the fundamental course; calculate other courses when you are sailing.

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- 163. From Fartak to Guardafui sail by the pole, and leave Canopus.
- 164 to Mayt by the Scorpion, but the pilots told me it is by ar-Râmih till the setting of the Crown.
- 165. If you depart from the islands of Qanā by the pole, you will get Mayt without fatigue.
- You shall arrive at Mukawwar and 'Aydarât by the setting of Achernar (Muhnit),
- 167. by the west, you meet Barbara, and by the setting of the Heart you see Zayla.
- 168. If you set sail by Orion from the Metropoly of Yemen, you shall see Socotora and its southern end clearly.
- Sirius is the course (bearing) to 'Abd-al-Kūrī, the Crown to Guardafui, o brother;
- 170. by the rising of the heart to al-Kuhl Mountains; by Centaurus the mountain of Mayt stands high;
- 171. by the southern pole Barbara; then by the setting of Canopus Zayla will appear
- 172. After that I mention among these departure points, a ship course for the intelligent pilot.
- 173. Sail five zams in the high sea, off Mayt, you can get Midwar by the rising of Arcturus.
- 174. Whoever knows this computation is a perfect master of the sea.

59. (Departure points of al-Čumjuma mainland)

- 175. If you depart from the head of Gumguma to the land of Mukran, henceforth is the right course:
- 176. If you set sail by Cassiopeia to al-Karāzī, you may take the pole, it is a possible bearing.
- 177. By the rising of Capella is the course to Tâh Tâh, by Arcturus to Pasani, oh friend.
- 178. The Pleiades are the bearing for Diul. Apply it and set sail without being curious.
- If you depart from Gas to al-Yamma, navigate by Arcturus.
- If you desire, o brother, Milâha, sail due west, you will succeed.

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58. [Departure points of Barbara mainland]

- 145. Regarding the departure points from Barbara to Arabia, I mention what I experienced to the experienced pilot.
- 146. From Mayt to al-Bāb, set sail by the Pleiades, to al-Ara by Arcturus, oh little brother,
- 147. but to Aden by Vega, to 'Aşîda, I mean the wise 'Aşîda of Hadaramout,
- 148. by the pole. To aš-Šiḥr by the Calf, watch and sleep not as others do.
- By Cassiopeia to Fartak, by Capella to Hūria, doubt not.
- 150. Whoever sails from cape Guardafui by the Great Bear, arrives to the islands, for sure,
- 151. to Fartak by the pole, to Burum by the Great Bear, and to the Islands, Capella is not a bad advise.
- 152. But to Aden, by Vega; Arcturus is a course to al-ʿÂra, o intelligent pilot.
- 153. To al-Bāb, the course is by the setting of an-Nağm, I mean the Pleiades understand my poesy.
- 154. From southern Suqutra, set sail by the pole to Hāsik, by the Great Bear to Dafāri
- 155. by Cassiopeia to Fartak, by Vega to aš-Siḥr, and by Arcturus you arrive to the Islands.
- 156. The Pleiades will guide you to Dâr Zīna, and the pilots are sure to go to Fīluk by aṭ-Ṭā'ir.
- Set out by Orion to 'Abd al-Kūri, and to Gardāfūn by Sirius, it has been decided.
- 158. By the setting of the Crown, o brother, Banna will receive you, accept my guiding.
- You will reach Hāfūnī by the Heart, this head is called Qalansiya.
- 160. Any pilot sailing from Māmī by the pole, will reach the islands by his courage.
- 161. You will arrive at Hayriğ by the setting of the Great Bear, you expect to reach Fartak by Capella.
- 162. aš-Šihr by the Pleiades. Sail by the setting, Dar Zina appears to you clearly.

- 126. From Swidů to 'Adů, my friend, the course is obviously by the rising of Canopus.
- 127. They are eight islands, at the end of all the isles, o pilot.
- There are no inhabitated islands after them, but the ruins are numerous.
- The Guards are four at them, go not farther when you reach them.
- I saw many aiming points (nathāt), all of them are routes to the sea of Darkness,
- 131. ending at eleven of the Great Bear, and deviating to the East. This is the information.
- 132. I never saw any pilot mentioning any land, but a lier who abuses of your kindness.
- We never heard any correct information about the end of al-Făl, to be quiet,
- 134. but what I related in verse, so they say not I am not an ignorant.

57. [Departure points of al-Quar mainland]

- If you depart from al-Qumr mainland intending to cross towards the islands,
- 136. Navigate to Tīrī Ragā by Achernar from the side of Sa da, said my informer.
- Set sail from Bani Isma il harbor by the rising of Canopus, my friend.
- From Munkår, by the rising of Achernar, you reach Tirī Rağâ, discuss not.
- Also from Hadūda by the rising of the Scorpion, you see it, o high learned.
- Or if your course is by at-Ţā'ir from around the harbor of Kûs, pretend not.
- you will reach, o brother, Tirī Rağā. You can reach it from 'Abya harbor
- 142. by the rising of Arcturus, o friend. Also to it from Kūrī by Capella.
- 143. These harbors are situated at the eastern side. Understand my poesy.
- 144. I would have doubled my description, if my informers were not contradictory. o brother.

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- Measure three fingers if you desire Türi, and exactly Kaffini also.
- 107. The pilots measured the island of Malaki and tried it two fingers and a half.
- Its sailing distance from Külam Tamīl is 18 zams, ask about that.
- In case you hold on Canopus after leaving Kûlam Tamil,
 you will approach the Island of lârdīb.
- Polaris is two fingers in it and it is composed of 13 rocks in all.
- 111. Anyone who likes to go to Kīlâ', the course is by the Heart for the intelligent pilot.
- 112. Kīlā' is a big island, my brother, at Polaris one finger, this is its exact measure.
- 113. From it to Muhall, set sail by Canopus, I mean its rising at the west side precisely.
- 114. But you meet first Kandikal and Ğubti, ask whom you like to about it.
- 115. Šīḥ Dīb and Kāradīb are at Polaris half a finger which disappears not.
- 116. Kandīkal is at Polaris one finger, and Ğubtî at half a finger. listen all of you.
- Off Ğubtî is the region of Kandalûs. It is in the middle before Mălûsî.
- 118. At Muḥall, Polaris is at the level of the waters, and the Guards are seven exactly.
- If you set out from Muḥall at night and navigate by the rising of Canopus,
- 120. you meet, o young pilot, Mulük and Hadumatī, before Swidū, listen to my discourse.
- between Swidu and Tayram Türi, the sailing distance is twenty zams approximately.
- If you set sail from Hadumati to Swidü, profit of my words.
- 123. At Mulük the Guards are six fingers; at Hadumati, it is five fingers without doubt.
- 124. Navigate to it by the rising of Canopus, I say at latitude four fingers and a half of the Calves.
- From Swīdū to Fulo Mulūk, by the rising of the Scorpion without any doubt.

- 86. They experimented not a true measure on its southern end which is the place of ignorants.
- At its northern end, the altitude of Polaris is five fingers complete without any doubt.
- 88. The first line of islands is at Polaris 4 fingers and a quarter. Take my information and listen to it.
- The coastal line is at Polaris 4 fingers exactly and is separated from the littoral by 12 zams.
- According to the experimented man, the two lines are four zams apart.
- Their experienced sailing direction is by the Pole of Canopus. 'Andaruwa and 'Akkati follow the east.
- But Malki is aside the line, my brother, towards the setting of Canopus in the deep sea.
- Their number is twelve islands, there are routes between them, if you pass by them.
- All of them are inhabited till now. Leave them at left, if you pass by them.
- If you set sail to the mainland of India, your course is by the rising rhumbs, discuss not.
- I have been informed that the coastal line is composed of Kullati, 'Andaruwa, Kaffini, Malki,
- then Šatlākum, Kanğamanğalä, Kurdīb comes after 'Ammīnī,
- with its sea reef; then Tūrī Ḥarāb follows the isles of 'Akkatī, take my description,
- Türi Harāb and Kanğamanğala have two reefs situated at the setting of Canopus.
- 100. But this former reef is big and distant five parasangs in the opinion of the best pilots.
- And Fatiyya is a little bit deviated to the west of Kurdib, my friend.
- 102. Between al-Batr and al-Furmali, Polaris is four fingers by experience, my hope.
- Polaris is four fingers between Šatlākum and Kanğamanğalâ, change it not.
- 104. I have been informed that Kallatī is four fingers, and 'Andarawa three fingers and a half.
- O learned, 'Akkati, Banğaram, Kurdib have the same latitude as 'Andarawa.

- towards Ğinā, my brother, and Farsū at three fingers and a half, it is measured.
- Navigate by Vega to Mūsa Bārī and due west to Sunda Bārī.
- From Karimuwa sail by Orion, the Heart, the Crown and Sirius,
- by their setting to the famous Java, and by Canopus to Timor.
- They said: steering by the rising of Canopus to Banden islands is rare.
- I mentioned these unknown departure points and I mean the forgetten tirriffa.
- You shall see too many unknown islands at the east of this island.

55 [Salling Directions of the periphus of Seylan]

- 75 The periplus of Seylân according to pilots is by the Heart from Murāšī to Šullam
- 76. If you desire to go from Muräšī to Qadarmalī, sail by the pole of Canopus as they assured me.
- 77. From there go to Salawam and Makatam by Canopus.
- Change the course from Makåtam to Dannür, be courageous.
- to the rising of Orion . Set Sail by at-Tā'ir from Dannür to Taykal.
- If you navigate from Taykal to'Ayṭam. sail by the lucky Pleiades, you will succeed.
- Keep on its rising and hold on it. Then from Aytam to Rāman Kūta by Arcturus.

56. [Salling Directions of the Luccadive and Maidives islands]

- The sailing directions of Fal and Fal islands is by the pole. Follow it and be not afraid,
- to Muḥali, that high place, which is the territory of their Sultan and Wali.
- Navigate by Canopus from Muhall to the end of Fal by Canopus. It is a good course.
- Some pilots said the Făl's course is towards Canopus from their northern end till their extreme southern end.

- But the frontal side of Sumutra, my friend, has numerous and harmful reefs
- which strech towards the littoral of the mainland, I mean Siam, be informed, my friend.
- 51. There are much dirts in the west and South my love,
- 52. Much dirts and reefs are in the west and east of Java.
- Anyway, I related the famous places, I determined their names and those of the Islands.

54 [Departure points of the courses in the isles]

- 54. As for the departure points of the courses of the isles, my friend, I give you henceforth their description and their marks.
- Navigate by the Pleiades if you go east from Karīmuwa to Bayān.
- At Karimuwa, the Guards are two fingers and a half by calculation.
- Sunda is alike. Bayan is four and a half according to the pilot.
- Set sail at night from karimuwa to'Ūdī by Arcturus when you move.
- Then aim to Vega till Mulük and to Capella for Barnī, doubt not.
- Navigate by Cassiopeia to Şawlak and leave it. Şawlak is at Polaris 2 fingers.
- Go by the rising of the Great Bear to the island of Libuwa at 31/2 fingers of Polaris.
- By the rising of the Calf to Maqasir at Polaris 2 fingers and a half, deny not.
- But its southern end is at 6 fingers of the Guards. Take the description from who discerned and described it.
- 64. By Polaris to Zaytūn. By the setting of the Calf to Karimā. Guide yourself by the isles.
- 65. By the setting of the Great Bear from Karimuwa to Falitik, this course is common.
- 66. From Falitik you see the Calves five fingers, and some pilots say five and a half.
- Navigate to Singăfur by Cassiopeia and they say by Capella is a famous course,

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- at a distance of two months sailing towards the east and south for sure.
- They say the Timor islands are numerous and spread from latitude Great Bear six fingers to Great Bear eleven.
- 32. Nobody mentioned any harbor in their southern part by
- All what is related in the written documents of the ancient pilots are reefs and unknown isles.
- They said Făndă is opposite Timor in the east, know that.
- The sailing direction to Java is by the Scorpion from the rear, it is a true course, lie not.
- Then Sumutra according to intelligent pilots. These are my descriptions to you.

53. [Sailing Directions of Anadman archipelago]

- The characteristics of Andamand Isles are as follow: the altitude of Polaris is five fingers in them and no more.
- The sailing distance between them and the mainland of an-Nāt, is 52 Zams according to trustworthy pilots.
- And between them and Bānden and Siam 33 zams exactly.
- They are isolated in the sea, between them there are many routes which rejoice the sailors.
- 41. The largest ones my friend, are at Polaris four fingers and at one finger and half, follow them.
- The sailing direction to them is by Canopus till Ğāmis Fula, my confident.
- 43. If you hold on that course, you will meet only the islands
- called Miqä M\u00e4ruse, my friend. M\u00e4ruse is an inhabited mountain in Sumutra.
- 45. Numerous ruins are around these isles. These are called the big ones.
- May God not make their name famous, nor send to them any muslim friend,
- or if you set off southward to Mahkufanğ, navigate by the Scorpion.
- The course to L\u00e4mury and its mainland \u00dSumutra also, is by the rising of Orion, be informed.

- till Bahäya, the farthest at their right, o brother. Set sail from these isles by the rising of Canopus
- towards tîkā, then by the Scorpion to Tûban, this course has no defect.
- Hold on the Scorpion till Tikakūta and the known Java, o brother.
- Tīkākūta is an inhabited island where you may meet peoples at any time.
- Follow the pole, a true course, to Calves four fingers, I mean Falitië.
- If you set out from Tikākūta towards Java and its harbor, listen to me.
- Sail by the Scorpion four zams till it is unseen beyond the stern of your ship.
- Then you perceive Sunda Bări, the littoral route for the travellers.
- Also, you might see three isles clearly inside Sunda Strait.
- Their shape is towards Sirius and the Crown, and the route passes among them according to the Guide,
- between the ends of the two islands, I give a sure description of them.
- The Northern side is towards Java; the southern one towards Sumuţra, o young man, be careful
- Sail by the Scorpion by sight till Java at two fingers of the Guards,
- 25. you find a big isle off its harbor, its name is Tüban.
- Leave it at your left, and enter Java Harbor successfully and gainfully.
- If you desire Garšik and Sarbûya, these are harbors where gifts are given, o brother.
- Their emplacement is covered with plants till the residence of the king at a distance of one day march at a high speed.

52. [Sailing Directions of Timor archipeingo]

 Nothing is at the south of these harbors but Timor Šāšī and Fanden and numerous islands,

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Chapter VIII

Sailing Directions and departure points of the Inlands Mahariğe, Sumatra, Fili, Quare, Yencea, Coasts of Abyusina, Soundiland, Atwib, Mukrân, and lands in between. Informations related to those subjects, in accordance with oral sayings and written documents. God know the truth-

51, [Salling Directions from Malacca to Java]

- If you travel from Malacca towards Java, understand the sailing Directions.
- Navigate by the Scorpion till Sina becomes in the stern of your ship, you will succeed.
- Then Sail to Bahāya by the rising of the Crown, the clearest route.
- But before you reach Bahāya, you should pass on your way by the isles of Fisang and the strait of Charimon,
- and Hānuwa also. From this island, keep the sound always in your hands.
- Let not the depth be less than six armspans till salt zanği and Bahâya, so you get out safe.
- Beware of the big danger in that place, when you are still near Salt Zanği.
- Harry to the sound, then Zigzag till you reach the island.
 Listen to my guiding advises,
- because this is the beginning of Müsa Bärī that all travellers know.
- Balitun Islands are beyond Salt Zangi, in the East. They produce aromatic wood.
- 11. Leave all these isles at left, o traveller,

- After this region, there is no normal people, worth travelling.
- 104. because they are at the end of the world and fancied by the mind in fact.
- 105. We heard not any other knowledge and this learning is referred to by the masters of the sea.
- 106. O, friends, this is the end of the sailing directions, I mean for the coasts.
- 107. in the west and east, in Arabia and in foreign countries, in al-Qumr and China. This is the conclusion
- 108. about the correct ones, and I left the obscure ones for the boasting lier.

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- From Sahr-i-Naw to Kumbusa, your course is by the Scorpion, I mean its rising, not its setting.
- 84. From Kumbusa set out to Šanfā' by the rising of the Great Bear.
- 85. When you follow a bearing and meet a strong wind,
- 86. I mean the Sili or the wind blowing from Arcturus point, and the wrecking gale blowing from the rising,
- between Şūra and Kumbusa, approach any land and cast the anchor in the sea of Barni.
- Set sail to it by the rising of Canopus from Sahr-i-now one finger, my friend.
- Also by Centaurus, then by the North Pole, because it is big when you come near to it.
- W). Its northern end is at the level of the water. It is at five fingers without discussion,
- and is by the rising of at-Tā'ir from Sahr-i-naw. Polaris is five fingers in both of them by sight,
- 92. like Timor archipelago at the south of Java, my dear.
- From Šanfa, your bearing is Vega which is the shining and rising eagle,
- to the harbor of China, called Zaytun where Polaris' altitude is twenty fingers.
- From Zaytůn, the bearing to the end of the China king possessions.
- by the rising of the Crown, according to the informer following the experience of China and Java pilots.
 The Turks habitations are scattered in the north and
- west, my love.
- There is Gog and Magog in some isolated northern islands.
 If you like to hold one course from Sinëāfūr, set out to
- the high sea
- 100. towards Šahr-i-naw, Hatûn, also Qaltûn and 'Altûn
- 101. then Zaytun and you reach your destination. The name of the King residence is Kunbālak.
- 102. You find nothing at their southern end but dirts, and al-Gür as says al-Qādī, the historian

- Set out to Qafăși by the rising of Canopus, understand the courses and discuss not.
- The South Pole is the illustrious bearing from Buttam to Takwa strait.
- O, good pilot in that art, if you set out from Fulo Sambilan
- to Qafāṣī, navigate by the rising of the Scorpion's Heart. Sail towards it and avoid
- Ding Ding and Fulo Sambilan, which are one finger apart. So, deviate not.
- As to Ğühûr, the bearing is Centaurus, and to Barhala, Canopus, use your brain.
- From Takwa to Sumutra, my brother, the bearing is Achernar, by experience, and is the nearest.
- Some masters said the best route is by the Pole of Canopus.

50. [Sailing directions of the China mainland]

- And if you set out from Sumutra towards China, when you sail at night,
- navigate by the Crown happily to Barhala, and to Ğühür also.
- When you pass them, sail on the rhumb of Sirius, and slow not
- till you reach Malacca. Listen to my procedures, and the depth of the water is ten « armspans ».
- Understand that: before you come to Malacca, you will pass by Full Bāsalār and Qafāṣī, be informed.
- Ful Băsalăr is the mountain of Qafăși, and Qafăși is a reef under the water.
- Ful Bašalār has anchorages, if you see it by Arcturus, thank God.
- If you set out from the mainland of Malacca, be sure you steer by Sirius, o brother,
- towards Singāfūr. Leave Singāfūr towards Tīk by the Great Bear.
- Navigate from Tik towards Şūra by the setting of the famous seven Stars of the Great Bear.

48. [The Sailing Directions of the Eastern Mainland]

- From Sundīb and Fârdīb to Bengāla of Šātigām harbor, by Sirius certainly.
- At Šātigām, Polaris is ten fingers and half; some captains give another altitude.
- But the ancients said Polaris is eleven in the two Bengalas. So make your own experience.
 Whowever sails near the mainland should set sail from
- Whoever sails near the mainland, should set sail from the estuary of Šātiǧām
- to Zinğilât, due the South Pole after passing the obstacles.
- From Zanğiliyya to Nāğirāšī, hold on, my friend, to the setting of Canopus.
- 54. The Scorpion, o seafarer, is the illustrious bearing from Nägiräšī to Buttam;
- the rising of the Scorpion according to aš-Šūlī, from Nāģirāšī to the island of Fālī;
- the rising of Sirius, o captain, from cape Năğirăšī to Marţabān,
- because cape Martabân is transverse ahead all Siam, o inquirer.
- There is a chasm covered with little water, between nağirăši and Marţabān. Be careful, navigate not by Orion.
- If you intend not to go to Feyguh or to Kašmira keep sailing by Sirius till you reach
- Marţabân, then your true course to Butaqâla is by the South Pole.

49. [Salling Directions to the moinland of Slam and to Takwa archipelego]

- Navigate by the rising of Canopus from Fülo Tawähl to Buttam, you will be safe.
- So is the route to Takwa which are numerous islands without reefs.
- (added) whoever sails from Buttam to Takwa, should steer by its rising in order to reach it

47. [Sailing Direction of the Western mainland]

- From Murăši to Akrakûrî, sail due North, it is the true course,
- also to Mutabalî due the North Pole, I mean Mutabalî at Polaris six fingers clear
- And to Akrakūrī from Nakafattan steadily by the rising of the Calf.
- Akrakūrī is a bank covered by water, exactly opposite Sadrafattan.
- From Akrakürī to Ğudāwarī, by Cassiopeia, I mean its rising, strain not.
- From there, if you intend to go to Fašāš, navigate by Capella and be courageous.
- I mean Fašāš at Polaris nine fingers and a half. From Fašāš to Fūfalm, take my description.
- Your course is due north, be careful, deviate not from this route. Polaris is ten fingers at Fûfalm.
- Ğamăl dandî is opposite to Füfalm at the sea. There is a good route between them.
- Gamāl Dandī is a shoal plenty of stones, leave it at left and approach it not.
- Some captains leave it at right when necessary, be intelligent.
- From Fašāš, my brother, to Ğamāl Dandī, by the rising of the Great Bear, navigate to it.
- The Famous pilots said to Kanfār, the course is by the rising of Capella.
- Before you reach it, the watcher climbs on the mast; if he see it, incline and navigate by the Great Bear.
- Leave it at right, and go to your harbor of the first Bengala, and believe your informer.
- The sound is not useful there. Navigate not at night anyway.
- 45. If you set out from al-Kanfar by Arcturus,
- you will reach Sundib and Fârdib which are two islands situated, according to the learned
- 47. at Polaris eleven fingers, and are populous as it is said.

- till you reach Külam this is the coastal course and some Captains said till Kumäri.
- The Sola pilot said: the course from Kulam to Kumārī is by Scorpius, decide and navigate.
- 12. From Kumārī to kayāl by the rising of Capella, verify and discuss not,13. by the rising of Vega straight on, and by the rising of the
- by the rising of Vega straight on, and by the rising of the Ostrich in the little gulf.
- From Kumārī to Šullam, the course is by the rising of Arcturus; go ahead and take the opportunity.

46 [Salling Directions of Seytan]

- 15. From Šullam exactly to Murāšī, the course is by Capella
- 16. Murăši head is the northern end of Seylân my brothers.
- Nakafattan is opposite to Murāšī, on the mainland littoral, by the setting of Vega. Be careful.
- Four zams separate them, at the end of the Gulf, o vigourous man.
- 19. In case you are in a big ship sail not to Sullam;
- navigate to the south of SeylânMay God save you from the long distance and the strong rains.
- If you set out from Qumāri, follow the east of the Scorpion towards nearly Tūtāgām.
- From nearly Ţūṭā set sail to nearly Dannür by the rising of Orion without discussion.
- From Ţūţā to Dannūr by the rising of Sirius and be intrepid.
- From Dannůr to Rāmankůta, hold Arcturus, o Intelligent man.
- If you like to pass between it and the mainland, do it and be not afraid of any harm.
- 26. In case your course is from Dannûr to Râman is by the rising of the Great Bear, learn this:
- Tirkunamali will be at your left, so change your route and navigate
- by the setting of Vega to Muräši, and some captains said by Capella.

Chapter VI

The Salling Directions to Perstin, India, Sola's count an-Nait, al-Bung, Sisap, till the windward lands such as Beliton and al-Malauriès. al-Gür. In accordance with true infraenctions.

44. [Sailing Directions to Persin mainland]

- Henceforth, I explain to the Pilots the mainlands of Persia, India and Siam.
- First, when you set out from Ğarûn, navigate by Canopus and hold it
- till you reach Ğāš, o Proud man. Beware of Ğazza before you arrive at Ğāš.
- From the high sea off Gas's head, set sail to Sind by Orion, and incline to the Flying Eagle,
- because this sailing direction is somewhat wrong: some captains sail by Orion, some others deviate aside from Gäš's head.
- I sea not in its refusal any good; you should navigate by it, o good pilot
- because the ignorants are becoming numerous in my time; one discerns not the unlearned from the erudite.

45. [Salling Directions to India mainland]

- Listen to me about the sailing directions from Diul to Mahāyim.
- Beware of deviating from the Scorpion. And from Mahayim hold Canopus

- 135. Know that around al-Qumr, there are dirts, reefs and islands.
- 136. (added) At Plough seven fingers and on a shallow, incline to the left and steer on Arcturus' rhumb,
- 137. (added) till you reash latitude 8 fingers of the Plough as says who sees the Plough high.
- 138. This is the description of al-Qumr. I shall relate the fundamental mesurement in chapter nine.

- 116. Other captains said all the course is by Sirius. This is what is apparent, o intelligent man.
- 117. Al-Qumr is called after Qămirân son of Sâm son of Noe, our second father.
- 118. There are many islands off al-Qumr, when you pass it. They have their own signs.
- There are also shoals and reefs. They lay south of al-Oumr.
- 120. at Twelve Zams, o captain. They are big and have high mountains.
- 121. Nobody knows their number, nor how much the Plough measures in them. They are located in an empty place.
- 122. But the departure points and the distance will inform you about them, o clever man.
- 123. And the pilots of the regions of al-Qumr have special departure points for them, they acquired by experi-
- 124. They bring ambergris from these islands since very old times.
- 125. Some captains say that al-Qumr and az-Zang end not till the plough becomes unseen.
- 126. They see the lost ship if she sail in the middle of the southern part. May God protect you from making mistakes.
- 127. Anyway it is a place of sorrow and grief. Its reefs, waves and tides are awful.
- 128. If a ship enter, by the will of God, the Ocean Sea, in spite of the short time,
- 129. she will not have but the mainland of kanem. The southern Sudan is desert, be informed.
- 130. Some captains say that Kuri's harbor is at Plough one finger at the extreme southern end of al-Qumr, o pilot.
- 131. In the extreme north is Lülüğän which was reported to be at Plough 10 fingers.
- 132. and is situated between two heads in a deep which protects the ship from the southern wind, Take my word.
- 133. I mean al-Milh head at eleven fingers; and Manziläği is said to be at Plough ten fingers.
- 134. The erudites say the width of al-Qumr is twenty zams.

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- They say that in old times the Greek ships used to go to Oumr.
- 100. Also they used to come to az-Zanğ mainland and India according to their authors.

43. [Sailing Directions of al-Quarr Island and of the neighbouring islands]

- 101. At the northern end of al-Qumr, the elevation of the plough is certainly eleven fingers,
- 102. I mean at al-Milh head, o powerful man. The Arabs and the strangers know this.
- 103. Some captains say it is 12 fingers. Anyway its western side is eleven fingers.
- 104. Between this head and Q\u00e4yel, there are 56 zams without any obstacle.
- 105. Angazīgā is between it and the mainland. It is the best known among the islands. Take my information.
- 106. (added) Dumûnî and Mulălî are certainly at Plough 11 fingers.
- 107. (added) But Muwütü is at 10 ½ and is the best known, take my description.
- 108. There are many other islands in the sea. Some of them have names; some have not.
- God, the Inspirer of the Gospels, know the southern head of al-Oumr.
- 110. We have not heard any true knowledge or measurements or courses about it.
- 111. We are informed about its septentrional head, about al-Qumr's harbors, the Sultan's residence and the islands.
- 112. We shall explain exactly all that in another chapter with the departure points.
- 113. The sailing direction of al-Qumr is on the setting of Sirius. The waters there are rough for navigation.
- 114. There is another strange report: some rare captains tell it by experience.
- 115. It says that the sailing direction to the extreme southern end of al-Qumr, at Plough one finger, is on Canopus

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- From Hağra to Filuk, the plain course for the travellers is by Arcturus.
- From Filuk navigate to Müsa Harbor on the setting of Orion, o Chief.
- If you like to go from Filuk to Ḥāfūnī, set out by the rising of Canopus for sure.

42. [Sailing directions of the littoral of az-Zang mainland]

- The sailing directions to az-Zanğ is on the setting of Canopus. Hold it and deviate not.
- This course is plain when the ship starts from latitude Polaris five fingers and Sail towards Munfia and al-'Ahwar.
- 89. But when the ship reaches the latitude of the plough ten fingers, the banks remove her away from that course.
- If you have not experienced that place, the pilot alone can guide you
- to Sofala. The land ends at latitude five fingers of the Plough.
- No land can be found south of it, and the region of al-Oumr is far-off it.
- They say: the Sagara harbor is the end of Habas's mainland, when the Plough is no more seen.
- There is situated the source of the Nile of Egypt according to Ibn Hawqal, the vigorous and reference man.
- May God exempt us and every Muslim from needing this dangerous and obscure place.
- Some captains report strangely that from there towards the north West
- stretch the islands of al-Magrib and the endemic area of the southern part of the Ocean Sea.
- The sailing distance between them is big and lasts one month in strong winds.

- 67. Along it, the rocks and an-Nu man can not be seen from
- In case you see al-Quşayr and an-Nu man, set sail on Capella, o pilot.
- But beware, o captain, of the rocks in the water and of the banks.
- Some captains said the course by Capella from an-Nu man leads to Sadwan in the sea.
- Šadwān is an island, my master, in the sea off 'Abi Muhammad's head.

41. (Sailing Directions to the mainland of Berberal

- Henceforth are the sailing directions of the mainland of Berbers. I will relate their explanation and elucidate them.
- From as-Sa'id to Qaryat aš-Sayh, the coastal sailing direction is by the west. Listen to me.
- From Qaryat aš-Šayh, the land bends towards the setting of the Plough till Ras Barr's head;
- also till al-Ğin, o traveller, but beware of the mud and of the uncovered rocks.
- Every intelligent pilot should beware of the dirts, my dear.
- From there to the north, my brother, the frequented course is by Capella according to inspiration.
- 78. I would have expounded all what the trustworthy captains asserted, if I were not afraid my explanation would be lengthened.
- I would have explained the straits and mentioned the islands in their reality.
- But the pilot is responsible of such things. Understand that even if you are an erudite.
- Henceforth I report a second description, transmitted from pilot to pilot.
- From as-Sa'id to Ras Hanzīra, the plain course is by the rising of Arcturus.
- From Ras Hanzīra towards Hağra set sail on the rising of the Pleiades, and navigate by the help of God.

- 49. He described five routes between the right and left shores: the western one, the middle ones, and the eastern one.
- But I abridged this path alone: it follows the deep waters.
- In this route, the tide is helpful, northern, strong and strengthening.
- As to the northern routes, they are difficult. Comprehend all routes.

40. [Sailing directions from Siban to al-Quayer and Suez]

- The coastal sailing directions to al-Quşayr and Suez have not been mentioned by anyone
- of the pilots and captains but me, because this route is not safe.
- 55. The banks do not allow to navigate in a single rhumb. This is my true information.
- But the route of the high sea, my brother, is an easy one from Sībān
- to 'Abī Muḥammad's head. The course is by Capella and Cassiopeia and no other rhumbs.
- 58. 'Abī Muḥammad headland appears as a promontory between two deeps:
- that of 'llâ and that of at-Tur, whose name is so known among all Nations.
- From 'Abī Muḥammad's head to Suez, take my descriptions and set sail by the fair and constant south wind.
- Al-Quayr is the land of the country at left. Comprehend my adaptation.
- [this verse is added: There are many roads, my brother; between Suez and Al-qusayr: all are dangerous]
- 63. The name of this route is Garandal, they say it is the place where the Pharao was drawn.
- 64. Opposite to it is the city of Klysma: it is in fact a village which gave its name to the sea in old times.
- This is the route from Siban to 'Abi Muḥammad's head, my brothers.

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- But in the east, o pilot, a bank appear to you, go on and leave it behind.
- This bank is nearby the eastern side of the island, and between them is a good road.
- There is also a road at the western side of the islands ('Abāʿil), and the bank can certainly be seen from them.
- Umm Šaytān is a sand bank and a shallow, which can be seen in the east from Al-'Aba'il.
- When you leave them behind, you see Sībān which has anchorages protected from all winds.
- Approach it from any side you come. May God protect you from harm and hardship.
- From there (Sibān), navigate diligently till latitude Polaris eleven fingers minus a quarter. And remember it.
- Direct the bow of your ship exactly to Cassiopeia and Capella in that place.
- Then incline to the east to Hedgaz and enter Gudda, the Harbor of the noblemen.
- Or, if you like to shorten the course, steer, my companion, when latitude Polaris is nine fingers.
- 40. to the Plough and Calf, then go straight on towards the North Pole. May God save you!
- But in case you see the Dāniq islands, these sailing directions will lead you aside destination.
- If you see al-Marma' and al-Ğadīr, steer on Cassiopeia and behave worthily,
- to Humays, then incline to al-'Aswad, beware of the dirts in that place, and move away.
- The ships follow that road I explained in short. So, no wonder
- if you take, o captain, another one, and steer on as Sarfa in case you see it.
- 46. The other routes are numerous, but they are tiresome and dangerous.
- 47. My father described them before me, and left not anything to be described by someone like me:
- 48. to the right and left, towards the north and towards all directions of the shores exactly.

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 üria islands to Fartak's head, steer, o my brother, on the Crown setting, and be brave.
- From Fartak's head set sail to the big city of Yemen, I mean Aden, on Sirius, be steady and hold it,
- I mean on its setting, oh scientists. From Aden steer on Orion, you make al-^cĀra.
- Also, the course from the coast of al-Ara to al-Bāb strait, is on the Flying Fagle, be not presumptuous.
- Sail not at night, oh little brother, and gaze (explore carefully), if you are not familiar and sure of the road.
- They say you might encounter the famous reefs having high tips and looking black.
- Between these reefs, my friend, and 'Atafi, there is a long way, take my descriptions.
- In case you follow that road to go north, beware of Dubāb. I salute you.
- Al-Bāb is an anchorage protected from the strong north wind. If you desire to anchor in it, do it.

39. (Sailing directions from al-Bab to Gudda)

- Be informed if you set out of Bäb al-Mandam's strait to go to Zugar, your course should be by the Little Bear.
- But beware of the Tawr and Dubāb's Heads, in case you travel to Zugār from that strait.
- As you should beware of Ğazza's head when you travel from Ğāš to Ğarun, o proud pilot.
- Az-Zuqar has at its northern side an anchorage protected from the north and south winds, don't lie.
- The fishermen live in its northern side, in the west, my love.
- At that side, in some places, there is a road due the North Pole, my companion,
- to Naṣab, al-ʿUryī, al-Ḥadīd, al-Bādiʿ, and az-Zuqar, oh my Guide.
- 27. Know that in its southern end, there are harbors in the west and in the east. Leave them and navigate
- 28. by sight by Capella setting to 'Abā'il and Sībān
- 'Abā'il has, o captain, various anchorages, known to the experienced man.

Chapter V

The sailing directions of north Arabin, Hedjaz, Siam the Berber's galf, Somalliand, Rhu, Zang, Quanr islands, till the end of Sadan and Kunem, in accordance with astronomical calculations and written documents.

38. [Sailing Directions from Garun to the Strait of Bab al-Mandab]

- Hereafter is the explanation of the sailing directions, abridged in verses, composed by the Intelligent Pilot.
- First, from the Sultan's harbor, I mean from Garun, the safety city.
- to Fakk al-Asad's head, steer towards the South Pole, then turn aside to the left, and be diligent.
- Hasten towards the rising of Canopus, you make Suḥār, the allied city.
- If you wish to go from Suḥār to Maskat, set course towards Orion and don't delay.
- And from Maskat to Qalhāt, set sail on Canopus steadily.
- From Qalhāt to al-Ḥadd's head, point on Orion and don't leave it.
- In case you desire not to sail along the Arab Land, steer towards the Scorpion from Fakk al-'Asad's head to al-Hadd's head.
- Canopus guides you, if you travel from al-Ḥadd's head to Masīra island.
- From Maşîra island, oh boy, to Hüriya, your course is on the Scorpion, it is experienced.

- 169. By the grace of the Sovereign who knows every thing, I have finished the heights of the « Small Stars » (mansions) of the south and north,
- 170. computed upon the Nuruz, the setting of the Stars, and the Byzantine months, without fault.
- 171. Between them and us, there is a difference in counting the years, oh, you who knows well.

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- 150. This suits you. On September 28th, listen to my words.
 151. Between that height and Aldebaran, Capella and its
- Companion become in horizontality
- 152. above the north pole, and Capella stays high towards the Pole
- 153. in horizontality with its Companion, my friend. It is a good height. Measure it on its time.
- 154. It is two fingers and a half, my friend. Al-Mih and Polaris are equal? Take my description.

36. [The height of the Lions' Arm]

- 155. Spica rises at dawn on the 320th day of the Nuruz.
- 156. At this time, the Lion's Arm culminates. Its height is one finger and a half in that place;
- 157. from the 11* day of October according to the Calendar
- 158. till past four months of the Nuruz, my friend.
- 159. Also, at that time, the night and the day are of equal duration, and the people eat the grapefruit
- They harvest the barley. It is called the Automnal equinox.
- 161. In October the Arab Moon is in conjunction with the Scorpion sign

37. [The height of the Liou's Eye]

- 162. On the 350th day of the Nuruz, the Claw rises at dawn exactly.
- 163. The Lion's Eye culminate, above head; and Polaris and the Calf are in horizontality.
- 164. But the Calf position is towards the east, I explained that correctly.
- 165. The height of Polaris at that time is one finger and lasts five months for sure.
- 166. This rising occurs on November certainly
- 167 The ten heights are finished now. The intelligent pilot finds by them the necessary course.
- 168. I intended to shorten my poetry in order to avoid the excesses.

- 133. Calculate this on September's second day. At that time, the east winds will be met
- between Hormuz and al-Bāṭina, and from Aden to Fartak, remember well.
- 135. Then, you see Achernar on the eve of its setting, measure it and measure Canopus
- 136. before the setting, don't forget, if the Pleiades culminate overhead
- 137. Each of the two will become, young man, two fingers and a half, you can see it by your own eye,
- 138. in the places where the height of Polaris is eleven fingers, without fault. If you increase it, Polaris will descend joyfully
- one finger for each finger on the Arabian and Indian Coasts. It is an excellent measurement in my opinion.
- 140. My friend, the Claw and Canopus will be in horizontality, understand what I mean,
- 141. in that period, clearly. They are six fingers plus, on the headland al Hadd
- 142. till the 80th day of the Nuruz, then they set and can not be measured, this is experienced.

35. [The Height of Mirzam]

- 143. On the 305th day of the Nuruz, the Barker rises at dawn, and the sun
- 144. is in the Cover which is the beginning of the Balance sign in the « long times ».
- 145. The Orion's Left Shoulder's mansion culminates; then the height of Mirzam is two fingers and a quarter, take advantage of it.
- 146. Know that the Big Calf will be vertical on the Little
- 147. Measure them both on the headland al-Hadd seven fingers tight; it is a good measurement, don't leave it.
- 148. And keep taking it for three months and fifty days in plus.
- 149. I mean, of the Nuruz. After that, it will be finished, and another measurement will suit you. Calculate and memorize.

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- 115. This measurement last my friend till the begining of the Nuruz, and till the runoff is shown on the ground.
- 116. All this will pass. May God protect you from the ignorance and from clashing the land.
- 117. After that, the Luckiest Star's mansion culminates. The height attained its extreme value before that rising.
- 118. Its height is then three fingers and a half, when the good measurement is taken on the islands.
- 119. Listen, brother, the height of the Whale Belly and the Female Camel is four fingers.
- 120. This is the last height of the southern mansions. Apply it and listen to my description.

33. [The height of the Ram's Horns]

- 121. When 250 days and three extra days to be exact, have
- 122. The Lion's Eye rises at dawn, and the Ram's Belly culminates.
- 123. then, Polaris will be vertical upon the Big Calf, and its height will be three fingers and a half. Imitate it.
- 124. The elevation of Dubhe and of the Big Calf is five fingers on the headland of al-hadd. Understand and follow it.
- Canopus rises like a lamp from the South in al-'Atwah land.
- 126. This rising occurs on the 7th day of August as calculated.
- My Dear, my explanation is valid for two months of the Nuruz.
- 128. Know, my brother, that the opposite of the culminating star is the Claw without fault.
- 129. Be careful. don't steer upon the Calves.; their measurement may not be taken.
- 130. The Calves are all approximate, but they are correct with the Ram's Belly

34. [The height of Aideheran]

- 131. On the 280th day of the Nuruz, Aldebaran culminates
- 132. at dawn, and the Lion's Neck rises at dawn. Its height is three fingers at that situation.

- This measurement is obtained at dawn on the 15th day of June, according to what has been mentioned.
- Also, you surely see at that time the Arrow's Head., and the Calves.
- Take the Calf 10 fingers upon the headland of al-Hadd, when the Arrow's Head is in horizontality, and don't exceed ten.
- The difference between them is easy and is not worth separation.
- 100. The experienced pilot can measure the Sillibar and Vega
- 101. especially below in the first climate, my brothers, understand my poetry and its meaning.
- 102. Their measurement, my friend, is four fingers at the Headland al-Hadd. Listen to my advise.
- 103. Vega is setting; and the Oath Breaker is still on the eve of rising.
- 104. When Polaris decreases one finger, Achernar increases.
- 105. The bright Vega stays four fingers and doesn't change, for true.
- 106. On the headland al-Hadd, the measurement of the Oath Breaker has given four fingers. Anyone who breaks his oath is mistaken.
- 107. [because the mansion attained its extreme height above the horizon, it does not need to come nearer]. [False Verse added].
- 108. This is true till at-Tair setting, my friend, and then it resumes its motion towards the setting point.
- 109. If you see that the measurement of Vega is two fingers, then Achernar is on the level of the South Pole when observed by human eye.
- 110. So are also the Two Asses and Crux, oh, well informed pilots;
- 111. if their measurement is done then they are in horizontality, and on the same level as the South Pole.
- Take the measurement of Achernar and Vega when Sirius rises, you will be right,
- 113. because Achernar is nearer to the South Pole than Canopus, my friend.
- 114. Achernar is farther than Crux from the South Pole. Listen to me.

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- But Polaris position is rather shifted a little bit to the east, because it is the origin, take my word.
- The Lucky Swallower culminates, my brother. There are two good points of View about this.
- There are also two points of vue about the Swallower's opposite, I mean about the Lion's Sneeze, seen by human eye.
- Some peope say the Slaughter culminates, I showed it to the good thinker.
- At that time, the Southern Mansions appear in the heavens and don't set.
- and all the northern mansions are under the horizon, my brother.
- 85. except some of the Ram's Stars, such as the Ram's Horns. Ask anybody you like to, about this.
- 86. The height of Polaris is three fingers exactly, oh, happy
- Its measurement lasts, my friend, till the 300th day of the Nuruz clearly,
- plus twenty nights and three nights to complete the number of days.

32. [The Height of the Anterior Pourer]

- When 201 day have gone from the Nuruz, oh, Pilot full of energy, understand me.
- when the Lion's Head rises exactly at dawn, and the Anterior Pourer culminates according to the calculation,
- when the Two Calves have the same measurement of eight fingers at the headland al-Hadd.
- when the Sillibar is above the sea and has a measurement of one finger without fault,
- when γ Cephei stays above Polaris, and both are on the eve of descending,
- then, the height of Polaris is four fingers and Polaris is in its extreme position.
- The height of the Lion's Tail is opposite to that. This decreases the height and that increases it.

_ \\\-- 32 - The height of Shaula is one finger and a half in another descent. This is my description.

30. [The height of the Ostriches]

- When four months and three days have gone from the Nuruz.
- the Posterior Pourer rises always at dawn and Polaris culminates absolutely.
- 65. This occurs at the end of March according to the calculations of astronomers. It is a good time.
- In that season, you see the odoriferous plants and the flowers. I inform you.
- Then, the Little Calf occurs over the Big Calf at the west.
- Polaris height is one finger and a half on the 290° day of the Nuruz
- Polaris height is two fingers when Shaula culminate's according to another saying.
- Then, the two Eagles culminate. Look at them by your own eye. The height increase, a quarter of a finger.
- The height of the Eagles is two fingers, even more, their opposite is Sirius, oh, praiseworthy man,
- because every height has an opposite one, oh, pilot!.
 When the opposite star is moving.
- 73. I mention this in that chapter, because it is a part of the true science.
- Some people say the height of at-Tair increase, half a finger. Know that.

31. [The height of the Swallower]

- 75. When five months and a half have gone from the Nuruz, The Ram's Belly rises at dawn. This is my description.
- 76. Aldebaran and Capella rise with the sun exacity.
- According to another computation, if you like, beginning May 7^a, seven is the calculation of an acute clever pilot,
- the Big Calf on that date is on the level of Polaris, rely on it.

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- The intelligent pilots called it Polaris Pin, because it pins the (north) pole.
- 45. When Polaris Pin reaches the setting point of the Calf, the Calf sets with the two Asses, be informed.
- 46. They rise together, and pass together over the pole at the same time.
- Then, it accompanies the two Claws, as it is prooved by its height which is half a finger.
- Canopus is opposite to the Slaughter mansion: when one of them sets, the other rises, my adviser.
- If the ignorant see it, he will not find it correct above and under four fingers.
- These motions are apparent. I explained some of them and some are obscure,
- because nobody helped me to understand them in my time.

29. (The Height of the Claws)

- When seventy days have gone of the Nuruz, the Lucky Swallower rises at dawn, this is a true information.
- Also, the two Asses come into horizontality, and the Great Calf culminates
- 54. high above Polaris. The Height is then half a finger. Understand this, oh, intelligent pilot!
- Understand this, oh, intelligent pilot!

 55. The elevation of the Asses is five fingers at al-Ḥadd
- headland. It never exceeds this figure.

 56. From February 5* on, the five fingers stay always during this occultation, my companion.
- 57. The Sting's mansion culminates at that time, and the Lion's Eve mansion has a place in the west.
- 58. From that time on, the Calves are vertical and Polaris is above the water;
- 59. It is calculated that they stay till the 200th day of the Nuruz, and the pilots tried another month more.
- Let it be known that Polaris, when above the water, takes the height of the Pourer. Enquire about this.
- When the Northern Hemisphere's mansions culminate,
 Polaris does not reach them nor up nor down.

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- Polaris smallest elevation happens at this time, I mean when the Lion's Tail mansion culminates, oh, my beatiful!
- Then Polaris elevation attains two fingers, learn it and do'nt discuss.
- Let it be known, my friend, that the Calves have the two equinox points without anything else.
- 31. Say it to all the world. They rise at that time and appear.
- The descending Calves set in horizontality when the Pourers culminate.

26. [Polar Distance of some stars]

- The Polar distance of Polaris is two fingers. I am telling it to you.
- 34. The inexperienced Pilot thinks it is the pole, because it is the most renowned object in the vicinity.
- 35. The proof is clear like the sun: after the culmination of the Whales Belly mansion, the Calf diminishes.
- The polar distance of the Big Calf is said to be eight fingers, sir.
- The polar distance of γ Cephei is said to be eight fingers also.

27. [Disposition of γ Cephei, Polaris, North pole and the calves]

- Y Cephei, Polaris, the North pole and the Calves are disposed like one illuminated letter
 of the Arabic Alphabet, I mean the Lam. The Pole is
- situated on its bending, be informed;
- Y Cephei on its head and the Calves on the tail. This is its appearance.
- 41. You may draw it from right or from left
- But they form a clear straight line, when the Pourers' mansion culminates.

28. [Disposition of γ Cephei, Polaris and the North Pole]

 Y Cephei, Polaris and the North Pole are disposed in a straight line, not curved.

- Neither the stars of that mansion, nor Spica have any height at that time.
- The pilot can find the proof in the elevations of all mansions from the Lion's Sneeze till the Claw.
- Oh, polite pilot! Crux has many experienced measurements.
- but I mention only what is used and useful to the honorable pilots.
- The first measurement is that of α Crucis which is separated from the sea and γ Crucis
- by four fingers, at the headland of al-Hadd. The Angle of the Barker indicates it.
- After that, if Spica culminate, and δ and β crucis are in horizontality, oh! reliable man,
- their measurement would be at the headland of al-Hadd five fingers clearly and both decrease when Polaris increases.
- It still can be measured, use it all of you, it has no comparable Star in the Hedjaz.
- 19. I invented all this by a gift from the Obeyed King (God);
- Nobody can reach all that but the intelligent and clever pilot.

25. [Polaris Ascent and Descent]

- The difference between the greatest and smallest elevations of Polaris is four finger. I am giving the exact number.
- 22. So, it turns aside towards at-Tair no more no less.
- The ancient pilots never mentioned six fingers for the Pourers. And I don't say that.
- 24. The greatest deviation from its initial position to the east occurs when Shaula's mansion culminates, oh, my authenticator!
- The greatest altitude or elevation takes place exactly when the Pourers' mansion culminates,
- because it is always moving. γ Cephei has also the same performance as Polaris.
- Polaris greatest deviation to the west appears when Orion's Head's mansion culminates, my beloved!

Chapter IV

On the measurement of Stars alkitude, its time and months, its reliability and abstention in accordance with the Nuruz computation. The accent and descent of Polaris and of the

informations related to those subjects.

22. [The Fundamental Measurement]

- 1. When 20 days or less have gone from the Nuruz,
- the fundamental measurement can be correctly obtained. And this measurement is true and renowned in the art of navigation.
- 3. When half of the month of December has gone.
- then the Lion's Tail mansion culminates and it is the best known mansion:
- the Calves are then in horizontality, at the east point, and Rigel sets.
- 6. At that time, Polaris does not have any elevation

23. [Measurement of Vega and Sirius]

- 7. Measure Vega and Sirius in that period accurately,
- and do it till the 190° day of the Nuruz, as I have indicated before.

24. [Measurement of Crux]

 Measure Crux, except in that occultation, when the Barker's mansion culminates

21. [Prime of different nurus]

- The prime of the Persian calendar is the first day of the month Farwardin Mah.
- You should know that the 25th day of the coptic month Hatur is the prime
- of the Arabian and Indian Nuruz, and others, my friend!
 But let it be understood, may God give you my intelligence.
- that we still have the Imperial Nuruz which begins when the sun enters the sign of the Cancer.
- But the catalog makers and the astronomers consider that the Nuruz begins exactly,
- 34. my friend, on the 21st of November, one of the Byzantine months.
- 35. The Scorpion's Crown Mansion rises on the 19th of the same month and may be seen at dawn.
- We ourselves consider that the Scorpion's Crown mansion rises at dawn on the 13° of November.
- These are absolute rules in reckonning the prime on the basis of the Byzantine year.
- Oh, Catalog maker! I urge you in the name of GOD, if the sphere deviates in the future, correct what you doubt about.
- And don't change the other sciences at the same time you modify the Astronomy and the constellations.
- This poem is the compendium of the experienced man; nobody doubt about it among all Arabs

- so that half of the mansions appear during the day and can not be seen at night;
- and the pilot use at night the other half in his courses, but he misses to observe
- two mansions, all the times, because of the bright sun when it rises.
- So, young man, the net number of mansions observable at night in all times, is twelve. Remember it.
- I will mention all the mansions from the prime of the Nuruz till its end.
- 16. and the circumpolar stars that never set or rise.

19. [The Arab Naruz]

- The prime of the Arab Nuruz coincide with the setting of the Pleiades at dawn.
- Then the rising mansion at dawn is the Scorpion's Crown mansion, and the culminating one is the noble Lion's Forehead.
- The Luckiest Mansion is culminating underneath; you can not see it: leave it after five days.
- Calculate the occultation of each mansion and count for its appearance a period of
- 21. four plus nine days. Nobody disagrees on this point.
- 22. So all the twenty eight mansions have sixty
- 23. days plus three hundred and four days.
- Oh, expert in occultations! This year admit no doubt and no discussion.

20. [The Lunar year and the Solar year]

- The precedent year is an Arabian calendar, established by the astronomers in old times.
- The Lunar year has a number of days smaller than that of the Solar year.
- The calendar of the Copts, Persians and Byzantines have one day in surplus.
- 28. This difference is least. The experienced pilot will not doubt it

Chapter III

Rules of the measurement of stars altitude. The Arabian and Imperial Nurvaz. The Calendars of the Araba, Byzantines, Copts and Persians, and the computation of their Golden numbers or primes by mathematical means and by the rising and settling manaious at dawn, in accordance with the Nuruz.

17. [The Measurement lasts six months]

- If you like to reckon the elevation of a star, listen to the discourse of an intelligent trusty.
- In the suspension of travels or their performance periods, or in any other time, don't discuss with me,
- if you observe, young man, a star height or a culminating star becoming horizontal,
- 4 you should know that its measurement begins at dawn. If the star comes to the west, take another one.
- Leave it six months till you see its measurement coming
 at dawn. Then you know it is culminating. Measure it six
- months, oh, man!
- from the beginning of the night till its end. I advise you to do it, my friend.

18. (The Mansions of the Moon and the measurement)

- Every year has twelve months. All peoples determined this number.
- The days of the year in lunar computation, are three hundreds and fifty four.
- 10 They represent the time taken by the twenty eight mansions to complete one revolution. Every mansion has a setting in that time.

- If the bow of the ship is towards the Pleiades, her stern is towards Orion's Belt, my intrepid man.
- The two Stars are opposite to each other, and Altair is the lonely star between them,
- 44. because it has no opposite star and its position is just between the northern and southern hemisphere.
- 45. Other stars may rise at his rising point, my companion,
- 46. since it is the best known and has been considered the base of that construction.
- Its zams are said to be forty and have been fixed before us
- 48. for the exactness of the computation. The principle in this is the calculation from the poles.
- because they are the basis of these Zams and the signs of the direction of the prayer in Islam.

15. [Exactness of the Poles Computation]

- Oh, my brother! It is a secret computation. The intelligent man alone thinks of it.
- It is the most correct calculation in the science of the sea, according to the men of experience.
- 52. These stars and rhumbs are approximate in the View of the Arabs, oh, pilot!
- Don't sail on them by human eye in a narrow or dangerous place.

16. [The fingers of the circle, the number of the mansions and the rhumbs]

- 54. The renowned fingers of the rhumbs and Mansions circle55. are counted seventy plus seventy plus seventy plus four
- 55. are counted seventy plus seventy plus seventy plus four plus ten.56. The total number of rhumbs is considered two times
- sixteen; test it.

 57. That means an excess of four on the number of the
- 58. When you see the stern of the ship directed toward a star, adjust her bow toward the selected
- opposite star. Understand what I mean and know in which rhumb Polaris is.
- Needless to make my Poem in rağaz longer. This computation appears very clear.

mansions.

- as Betelgeuse and Rigel are on either side of Orion's Belt according to the rules [of Astonomy].
- To human eye, whatever rhumbs are nearer to the celestial poles increase in vision and in calculation.
- And whatever rhumbs are nearer to Altair are seen narrower by the intelligent pilots.
- All the rhumbs are equal in the compass. This is the computation of rhumbs, without any fault.

13. (The Zams between the rhumbs)

- The tiriffa between Capella's rising rhumb and the rhumb west
- is two zams for every two consecutive rhumbs. That was decided since the east and west were created.
- By observation, every star's rhumb has five zams from the Capella's rhumb to that of Altair.
- 32. So, it is for the renowned Mirzam and Aldebaran, because they are two halves.
- And the Sting rhumb is like that of Capella when compared, my brothers
- And as the Vega rhumb. The Scorpion's Crown rhumb is one zam less. Refer to my saying.
- The Poles finger equal eight zams, it is fixed for all the world, and exact.
- The finger increases by two zams, if you deviate towards east or west. Calculate on that basis.

14. [The opposite rhumbs]

- The Sillibar is opposite to the Guards and the Stretcher to Canopus for sure.
- The two Asses are opposite to Cassiopeia and are omitted in calculation, my companions,
- because the Stretcher and Canopus are close to them.
 This argument is clear.
- Capella is opposite to the Sting of the Scorpion on the square points of the rhumbs circle.
- 41. The Scorpions Heart and Crown are opposite to Vega; and Sirius to Arcturus without discussion.

 I mean the foremost Water Pourer and the Hindermost ones. Let it be understood. Then comes the Whale's Belly, be informed.

10. [The Mansions Motion]

- 10. These mansions move with the rotating celestial sphere.
- So, when a mansion sets, an opposite mansion rises at the same time.
- When a mansion culminates in the north, another one culminates in the south, according to the astronomers.
- The pilot should know the rising mansions and the setting ones and the fourth star.

11. [Names of the stars of the compass Rhumbs]

- Henceforth, you should know the rhumbs round the ship, my brothers.
- They are Polaris, the Guards, the Great Bear, Cassiopeia, the Goat (capella). Listen to me.
- Then the renowned Vega, Arcturus, the Pleiades and the Divider of the Spheres (the Eagle).
- Next come Orion's Belt, then you see Sirius and the Scorpion Crown and Shaula (the sting).
- The two Asses (α β centauri) and the bright Canopus which is well known and southerner.
- The Oath Breaker, near the South Pole, is mentionned in the books of all nations
- Those were the rising points. No need to give the setting ones for the clever pilot.
- 21. The easy signs suffice the free pilot if he is intelligent.

12. [Names of the Stars of the half-Rhumbs]

- 22. The positions of Aldebaran and Mirzam are near Altair, young man!
- Aldebaran is in the northern hemisphere; mirzam in the southern. Intelligent men measured them before us.
- The expert in the art of navigation believes they are both in the same rhumb,

- 1YA - - 21 -

Chpater Two

On the munstons of the moon and the rhumbs of the Arabian compass; their use in navigation, their symetric points, their fingers, other than those of the teriffix the knowledge of the terriffin. Informations related to those subjects. God's knowledge is better than ours,

8. [Northern Mansions of the Moon]

- First, I enumerate, on your request, the northern mansions of the Moon, which should be known.
- They are the Ram's Horns, the Ram's Belly, the Pleiades; then follows the Bull's Eye,
- then come Orion's Head, Orion's left Shoulder, the Lion's Arm, the Lion's Sneeze, the Lion's Eye.
- the Lion's Forehead, the Lion's Neck, the Lion's Tail.
 there is not a single deviation in my description.
- Then, follow the Barker and Spica, at the end of the good northern mansions of the Moon.

9. [The Southern Mansions of the Moon]

- Oh, my friend! The first three mansions of the southern ones are the Cover, the Claw, and the Scorpion's Crown;
- the Scorpion's Heart, Shaula (the Sting), the Ostriches; then the Vacant Space rises always.
- Then the Four Lucky Stars, the Two Water Pourers on whose shape the sail of the ship were tailored for a very long time.

- These ninety days form the closing period of the sea.
 Anyone who travels in it shall be afflicted.
- He shall suffer from loneliness, regret, strong upsetting and pain.
- 45. But, in case of necessity, many ships sail during that period, and many times the idiot crossed the sea in it and exposed himself to danger!
- 46. The clever pilot should not decide to sail during the forty days preceding the « Terima »,
- 47. because they have heavy rains that stop the bold pilot.

7. [Precautions before the travel]

- Oh, Pilot! if you travel in these forty days or in any other period, don't go ahead
- unless you are well equipped and have determined the courses of your ship — you can not overcome the sea just by looking at it.
- Your equipment should include the "compass." of the course, the helm, the card of the ship and the mariners.
- 51. Be sure your instruments are good before you travel, such as the compass, or the instrument of measurement, or the magnetic stone (needle),
- 52. the soundline, the lamp, the Rutter of the sea. If you have travelled, many people have gone on a pilgrimage.
- The pilot should stay humble when he becomes highly and completely skilled.
- 54. Be carefull when you sit to take the measurement, because the way you sit is essential for accuracy.
- 55. The requirements of the mastership are numerous. But I start with the important ones.

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- because the fishes could have carried it to the high sea, not near the shore.
- Besides, the Lazzaq caught by the fishermen is a sign known by intelligent people.
- The ancient pilots, venerable and reliable as they are, agreed upon the correctness of the sight of snakes,
- from latitude Polaris eleven fingers to latitude Polaris five fingers, especially in India, May God accept me as your ransom!
- The long fish called mariza, seen sometimes in the sea, should not be considered as a sign, if it is dead,
- 30. because the Almighty alone knows its mystery.
- The color of the water of the sea above the black muds changes to a large extent, because of the rains and the currents.
- so that the water becomes illuminated; the clever pilot does not miss this sight.
- Be careful when the change of color is accompanied by surf.
- Oh, pilot! Do according to your own experience in all what you see.
- Don't worry and follow your own experience for the landmarks and mountains.
- 36. Take from my book the true and correct landmarks only.
- But not as Ğüzarat in mount Ğulnar, and the land of Mukran in Hašt Lar.

6. [Knowledge needed by the nilets]

- You shall know the winds, the closing and the opening of the sea
- The closing lasts a quarter of a year, or a period of ninety days.
- The ship must stop sailing from the rising of the mansion al-Debaran (a Tauri) at dawn,
- till the rising of the mansions (8 v Leonis) at dawn also;
 Afterwords, she can go along the coast and in the high sea.
- This means from the beginning of the 200° day of the Nuruz till the beginning of the 290° day.

- my composition in verse will dispense you from referring to the Rutters of the sea written in prose.
- provided its reading is done under the supervision of a teacher, when the reader does not handle the ship by himself,
- because it contains, oh, my brother! symbolic thinking, which is considered as a lack of knowledge by the ignorant.
- Therefore, I advise you to take a firm position in the meeting of weak pilots.
- Don't argue with any person indiscriminately, but deal with your equals and with the bold ones.
- Some of the problems of the sea are empty talks and can be understood by a stupid.
- Whoever misunderstands an obscure problem, retain it well.
- especially if it is an enigma without any approved and assorted origin.

5. [Signs needed by the pilots]

- Anyone who inquires about the sailing distance, or the direction of the course with every defect in it,
- or the reliable measurement, or the star height, or the port of departure experienced by the ships,
- 19 or any star according to the Nuruz computation, or the period of voyage in the opinion of clever seamen,
- or the experienced horizontalities, shall find the right information in the following explanation.

* *

- Here is what I say about the mud, the snakes, the sea birds, the fishes and the herbs.
- Don't rely upon the signs of approaching the land, unless you have experienced them, or have verified what has been described to you.
- But the sounding and the al-Lazzaq are correct signs everywhere.
- The Lazzaq may be a good sign or a false one, when it shows some yellow spots,

Chapter one

Thanking and praising the Masters and giving the beneficial signs necessary to the pilots, such as the mud, the herbs, the soundline, the fish Mariza and the likes.

3. [In the name of God and thanks he to Him!

IN THE NAME OF GOD, THE MERCIFUL AND BOUNTI-FUL.

- Thanks be to the Creator, the Magnificent, the Victorious, the Unique without any resemblance to Him.
- Thanks be to Him for converting me to the religious faith of the Prophet of the Adnanite tribe
- and for leading me to the poems of the pilot bn Kahlan and of the two pilots Sahl and al-Layt son of Šādān.
- 4. These pilots are intelligent men who reformed the Art of Navigation. May God embelish the paradise for them!
- I beg God to forgive me for what my tongue diminishes or adds.

4. [Presentation of the Poem]

- Oh, Navigation's apprentice! I offer you this poem and it is an excellent one —
- dealing with the Science of the sea and Astronomy and mathematical calculations, and with the findings used in doing the right things.
- If you are diligent in your learning and talk about it with your instructor everyday,

ever and devolved to those who are not experts in it. That is why I was urged to compose my Compendium. It includes strange terms and divine sayings, by the will of God the Supreme, which I hope will give satisfaction to the intelligent pilots when they meet any difficulty or suffer any damage.

To compose my Poem, I consulted the current poems in Ragaz written in my own time, and the detailed Rutters of the sea; but all of them are full of hesitations and repetitions. My Poem will content everybody, and preserve the sailor and deliver him from danger.

On purpose, my poem is abridged, and the superfluous ideas are omitted from the abundant materiel; otherwise, it would be tedious to read, and the busy pilot wouldn't have enough time to go over it. May God have mercy towards those who forgive me for any mistake they might find in it and correct it.

I titled my poem in rağaz: « THE SCIENCE OF THE SEAS, A COMPENDIUM OF BASIC ELEMENTS ». It consists of eleven chapters. The composer, the poor servitor of God, the avower of its incapacity and retardation, the least among the servitors of God, who is in absolute need of His mercy, the last of his ancestors, the reference of his successors, is the renowned master AḤMAD IBN MĀĞID IBN MUḤAMMAD IBN OMAR IBN FADL IBN DUWAIK IBN 'ABĪ ar-RAKĀĪB an-NAĞDĪ, may God forgive him and forgive all of his forefathers.

Hereafter are the chapters of the poem in ragaz.

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Al-Hāwiya

IN THE NAME OF GOD, THE MERCIFUL AND BOUNTIFUL [May God help me]

I. |Thanks he to God)

Thanks be to God for my good fortune, for inspiring me the truth and its achievement, for guiding me in the sea and its routes, and for giving me assistance when I head my ship east or west. Thanks be to Him for the knowledge imparted to me and embracing the serene and pleasant sea, and for the eloquence which amazes the bright elocutionist. On the Illiterate Prophet, on his noble family, his companions and supporters, be God's blessings and peace!

[The Poem is composed to guide the navigators and conserve the science of the sea]

Hence, one should choose modesty with its scarcity, and the simple and accurate wording. The composition of such a poem in Ragaz requires sharp intellectual insights and discloses a secret, kept hidden for ages. In writing it, I obeyed the order of the King of the Angels, the Ruler of the Universe and its Spheres, because He said (in the Holy Coran), may He be exalted, He always say the truth: « They guide themselves by the signs and by the stars ». So, my outlooks became true, and I realized in mind and in fact, that my Compendium will be the guide of the navigators after God, may He be praised.

I was afraid the ignorance might spread out among the creatures of God, and the science of the sea could be lost for

Chapter X

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meter in such poems is called Rağaz, which is very close to prose. The remaining wording of the title is most important: it shows the real subject: the principles of the science of the seas. Later on, the composer will explain them under eleven topics and a prologue. NAVIGATION IN THE INDIAN OCENAN... being a translation of a late prose work of Ibn Māğid.

In 1836, Baron Von Hammer translated the Turkish Muhit into German, and James Prinsep translated the german translation into English: both translations were published in the Journal of the Asiatic Society of Bengal in the same year.

In 1970, 1971 and 1973, an arabic edition of most of the navigational texts has been established for the first time on the basis of six arabic manuscripts out of eight, known throughout the world, and on the basis of the original copy of the Muhit written by the author (autograph). It was published by the Arabic Academy and the French Institute in Damascus. 'Ahmad bin Māgid and Suleyman Mahari wrote all these texts, which are not the only ones in Arabic literature. Some ancient « lions of the seas » made many accounts of their nautical knowledge. Also, Ibn Fāṭima is known to have turned round Africa before the Portugese and written a treaty on navigation.

B- The « SCIENCE OF THE SEAS »

The oldest among the above texts⁽¹⁾ is dated 1461/866H. It is called « The science of the Seas, a Compendium of Basic Elements », or, litterally « An Abridged Poem on the Principles of the Science of the Seas ». Both translations of the title are equivalent and give a rough idea about the whole matter dealt with

But this title should be explained. First, the word « abridged » would, usually, imply a reduction in scope, with retention of the essential elements and a relative completeness in the subject. In fact, there is no reduction in scope, and the knowledge is set forth in details. This phrasing is a settled practice to insinuate the extensive learning of the composer in a grandiloquent style. Besides the abridged poem has 1082 verses. Second, the word « poem » is more interesting. It means merely a composition in verse. And this is it. Then, why the composition is in verses? The arabian sailors say: every little bit of rhythm impresses the mind and the ears and makes it easier to memorize and to remember, what is put in poetry. Anyway, the

⁽¹⁾ Al-Qăfryya, written in 865 H/1460 A.D., is the oldest in fact.

Introduction

A- The Arabic Navigational Texts

The Arab navigators wrote, in Arabic, in the 15th century, a genuine literature on the Art and Science of Navigation in the Indian Ocean and in its branches, the Arabian Gulf and the Red Sea. Their original works, in prose or in poetry, were reproduced by scribes or copiers of manuscripts, and sold to the pilots of Arab and Foreign countries.

The high value of these navigational texts has long been recognised. A first translation of some of them into Turkish, called «THE MUHĪT"» - the Ocean -, was made by the Turkish Admiral of the Fleet, Sidi Ali bin Husayn, as soon as 1554 A.D/ 962 H.; and a second one, into Ordou dated 1673 (1084 H.), is said to be in the Library of the Bombay Mosque in India.

They attracted the attention of the european scholars in England, France, Holland, Germany, Austria, Spain, Portugal and United States. Gabriel Ferrand edited in Paris, in photocopy, the two arabic manuscripts of Paris (Bibliothèque Nationale n° 2292 and 2559) in 1921-1923, 1925 and 1928. T.A. Chumovsky edited, in photocopy too, and translated into Russian, in 1957, the three poems of the arabic manuscript of Leningrad. G.R. Tibbetts, edited in 1971, THE ARAB

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These works have a minor value in comparison of his poems, although they are easier to read and possibly to understand. In fact, they repeat more or less what was written before them in poetry.

Ibn Mågid composed 41 nautical poems, too. They are called «'Urguza » and, sometimes « Qaşida ». Out of them, 17 are lost, or, let us say, not found till now. The remaining 24 contain 4603 verses. They constitute a corpus, or, rather, an organic and coherent treatise, in poetry, on Arab Navigation, in the 15th century.

The most important of them, the second in date and the best of all Ibn Māġid's works, either in verses or in prose, is «Hāwiyatu I-'Iḥtiṣār fī 'Uṣilı' Ilm al-Biḥār » or the Science of the Scas, a Compendium of basic elements. Its title implies that it is a comprehensive writing on navigation. This is true: all the subsequent poems deal with subtle and copious details, forcibly not included in the previous generalization. Al-Hāwiya forms then, in the conception of its composer, an overall view on the matter; and every late poem, a new elucidation, added to develop and clarify an individual idea stated briefly in the initial survey. Thus, the author enclosed in his verses his knowledge about the seas and his « theories » on navigation. Therefore, in strict logic, any analysis of his ideas should begin by the examination of his nautical « 'Urġwakt », and first of all, al-Hāwiya.

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PREFACE

Ahmad bin Māğid was, in the 15th century, a great navigator of the Indian Ocean and its branches, the Red Sea and the Arabian Gulf. He nerver accepted to be called a Pilot — Rubban —, or a Master — Muallim — or a Lion of the sea — Layt or intrepid pilot. He was pleased to name himself « ar-Ra'ls al-Muqaddam »", that is the Captain-Major in command of the ship, or « al-Muqaunif' Aḥmad »", i.e. the author 'Aḥmad. No doubt, he was very proud of himself, a high skilled expert in his art and the first and prominent « theorizer » of his time in the field of Arab Astronomical Navigation in the Indian Ocean. His Genius was by far superior to the talent of Sulayman al-Mahari who had been an intelligent copier of his writines.

He wrote 5 works in prose: « al-Mull » or the survey of the shores-a true rutter-, « Kitāb al-Fawā'id fi "Uṣtāl 'līm al-Baḥr wal-Qawā'id », or the Book of commentaries on the Principles and Rules of the Science of the sea-a lost manuscript-, « [Muḥtaṣar] Kitāb al-Fawā'id... » or The Epitome of the Book of commentaries... ", « al-Fuṣtāl » or the Chapters, and « Śart̄ŋ ad-Daḥabiyya » or the Commentary of the « Golden Poem ».

⁽¹⁾ The « Poem of the Substitutes », verse 2.

⁽²⁾ The « Golden Poem », verse .176.

⁽³⁾ This Epitome is called usually « Kitāb al-Fawā'id... »by the Scholars.

AL-ḤĀWIYA

THE SCIENCE OF THE SEAS A COMPENDIUM OF BASIC ELEMENTS

(Hāwiyatu-l-Ihtişār fī 'Uşūl 'Ilm al-Bihār)

Ву

AHMAD BIN MÂĞID

(825 H./1421 A.D. -906 H./1500 A.D.)

Translated and Edited

Ву

IBRAHIM KHOURY

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In fact this sailing season was told about in verse 520.
 Al-Kamāl: al-kamāl.

The expression «fil-galsati bil-kamāli» means in the sitting position to measure with al-kamāl. Galasa bil-kamāl stands iterally for to sit with al-kamāl. In Arabic, the preposition «bi» adds various nuances to the original wording, and denotes the existence of an ellipsis. In this instance, the omission consists of one word that can be easily supplied to make the clause seem more complete: galasa yaqīsu bil-kamāl. Thus, «fil-galsiti bil-kamāli» becomes «fi galstit-l-qiyāsi bil-kamāli». Many examples of this kind may be found in the detailed grammars of Arabic or even in Lisān al-'Arab. This is a hypothesis. This expression may be understood also: when sitting to measure in a perfect way.

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The second hemistich has been emended: muğmal into mamlaka and 'ilavhi into lahu.

86. Baršāt: ships

Plural of barš: ship. Cf. Rawh ar-ruh of Ibn Muṭahhar, f. 11 v, 1. 2-3. In the original, it is aš-šāšāt, emended into baršāt.

87. Tagawuman: bartering

Taqawama means to valuate wages in goods instead of cash: here, the copper is exchanged against silver: a kind of truck.

88. Taht al-malik: residence of the king

It is a persian expression meaning the throne or the seat of a king: figuratively, the residence of the king, his town or capital.

89. Ma'din: center

'Adana: dwell. Al-ma'din: a place where one stays in summer and in winter, that is all the times. Ma'din an-nudār: the place or center of gold.

90. Lidaka I-ma'din: to that center

In the original, kadāka has been emended into lidaka.

91. Muḥamarra: white

«Red» means white when speaking of human races.

92. Habt: flat land

93. Aštāt: isolated, lonely

Plural of *šatt*, denoting solitary elephants, isolated or lonely. In the photocopy, asnan is emended to aštāt.

94. Al-'aṭwāḥ: wilderness

Tāha: to be lost. 'Aṭwāh: places where ships get lost. It has the same meaning as aṭ-Tawa'ih: places of destruction.

95. The assonance of the rhyme is missing in the second hemistich. We completed the omission: it is one word (ṣāhibī) and does not influence any meaning.

96. There is no contradiction between the altitude of Damûtî in verse 642 (eleven fingers: Ibn Māgid asks the pilot to take eleven to be at a distance of twenty zams from Wamīzī) and its real elevation in verse 645 (ten fingers and a half).

97. Haya: breeze.

Cf. note 41. It means simple current of air here; breeze 98. Mawgatu š-šalīb: wave of the cross.

Ibn Māğid believes that the wave of the cross is one of his inventions: cf. al-Fawā'id, p. 191, 1. 6-12. He means by it a sea agitated all the times in the southern climates because of constant winds there.

74. Mafarid: indentations

Mafarid is the plural of mafrad, denoting creeks or bays or indentations which might be used as anchorages. In fact, al-furda is more classical. But the two terms are used.

75. 'Amriya: narrow submerged embankments

'Amriya is the plural of mirâ'. They are made of peebles or sands, at a depth of 5 to 8 stretched arms.

76. 'Urŭq: ridges

It is the plural of 'irq, meaning an elongated elevation on the bottom of the sea.

77. Suwălah: shore line

Sâla means among other things to extend: sa'il al-'aṭrāf: with extending ends. Suwāl: extension, lengthening, then shoreline.

78. Al-bald: sounding line

A cord weighed at its end, when thrown into the water, it reaches the bottom and measures the depth.

79. Šāhara: occurring monthly

It is a verb denoting the alternate rising and falling of the water suface every month.

80. Saqā: to flow (in the tide)

This meaning is given in Dalil al-Muhtar, p.294.

81. Al-'aqrabī: SE wind

Blowing from the scorpion rhumb

 Dallala: to follow a fair road
 In fact, dallala stands for sailing by an easy course gone over by other pilots.

83. Manā: to encounter

The verb mana means to be struck by, to meet to encounter.

84. 'Ilayhim: stay away from

In verse 533, a full stop should be put after biya, in the second hemistich. Then, a new clause would begin with 'llayhim which was explained by Sibawayhī to have this signification. Other understandings are possible depending upon the antecedents adopted for the pronouns in that verse.

85. Täli: neighbor

Kabir: large

Nahara: to be in the opposite side of, next to

59. Qità': submerged rocks

Plural of qit'a: underwater isolated rocks. Another plural; qit'at.

60. Wasah: dirt

Plural: awsāḥ. Another derivative: mūsiḥa in verse 336. Obstacles that block navigation.

61. Wusül hāfiya: submerged rocky crests

Plural of wasl. Another Plural: 'awsāl: linked rocky crests.

62. Bab: inlet

Entrance in a bar or in spit: inlet.

63. Nizāf: clear

Nukd: lack of water

Nizāf, plural of nazīf, contrary of dirty. Nukd: little water.

64. Farš: thick vegetation

Zahra: emergent rocks
 Zahra: rock above the level of the water. Plural: zahrāt,
 zihār.

66. Ša'b: far away

It is ša'ab in verse 366 for the rhythm of the versification.

67. Matrad means the clear route. Here the water course.

68. Ašrāk: roads

In the original, it is ašbāk, emended to ašrāk, i.e., terrestrial roads.

69. Al-Hašab: ships

Plural of hasaba, meaning ship

70. 'Argāg: shallows

Plural of riqq, standing for places in the sea having little depth.

71. Gawl: much earth, mud

The rhythm of the verse does not allow wa hwli - which has no meaning-nor wuhüli is permitted because it has no connection with the precedent word. That is why the emendation was wa jawli.

72. Al-ġalaq: closed season

Cf. note 17.

73. Matrad: course

Cf. note 67, but matrad in verse 429 is the well known head in Yemen.

the south wind 'azyab exclusively, because it is violent, agitates the sea, makes it black and put it upside down.

50 Šuhūd: witnesses, rising stars

Plural of sāhid, who sees by his won eyes, present, and, speaking of stars, rising stars. Cf. also verse 295.

- 51. The same altitude is given in verse 176.
- 52. Qama: to culminate.

Qâma fawqa I-quțb: to be vertical above the North Pole: to culminate.

53. Qiyas nafis or dayyiq: excessive or deficient measurement

Cf. note 25. Same for nafas in verse 467 and nafis in verse 475.

54. Oivās al-'asl: fundamental measurement

Measurement of Polaris when Denebola culminates, or the Guards, or the handle of the plough.

55. Al-Kaws: W S-W wind

Said to be the wind opposite to al-'Azyab in al-Qāmûs. It is reported in Tāğ al-'Arûs that: «The indian pilots travel to Yemen by the Kaws, they come back to India by al-'azyab».

The Kaws is defined by Ibn Māgid in al-Fawāi'd:, p. 157, 1. 10-11: "The winds of the setting of Sirius are called al-Kaws and al-marhān", that is the WSW.

56. Marba' ğanübî 'inhasā: little southern lookout

The second hemistich has been emended: wa kullima rabbi... kulli is deleted in the original by a clear mark, the remaining «ma rabbi» is corrected into marba': lookout. The verb' inhasa means to disdain, that is without importance, little.

57. Sahm: arrow

Al-Sahm means 10 fingers as shown in verses 290, 291, at least as defined by Ibn Māğid.

58. Tīrīma: tirimah

It is the fourth month of the persian calendar.

Ibn Māģid says in al-Fawā'id, p. 324, 1. 9-10: «They travel in the tīrīma, I mean tīrīma the quarter of an-nuruz, which is the first hundred days of nuruz».

44. Šawār: soft wind

Pure Arabic, mentioned in as-Sihāh and Tāg ak-Ārūs. Explained in al-Fawā'id, p. 330, l. 6-7: « As to the weak wind, when it is the end of a current of monsoon or the sawār... ». In verse 684 of as-Sufaliyya, it is put in antithesis with gāmiz: the wind that presses or pushes the sail, derivated from gamaza, that is to press.

45. Tahla: mudbank, or sandbank

Derivated from tahala I-ma'u: the water smells because of the putrefaction of organic matter in it.

The name is tahla or tahlāt, meaning an underwater elevation of sand or mud as said in al-Fawa'id, p. 367, 1.4 (depth; 3 to 4 stretched arms) and in Dalīl al-Muhtār p. 249.

46. Ši'h: reef

It means a chain of rocks underwater, at its surface or above its level. Plural: ši'hān: ši'āb.

47. Ğawš yamin: right bow Cf. note 16.

48. Gazara: to ebb

Madara: to split into crenelations

The first hemistich of the verse 229 must be corrected. It admits two emendations. If the mis-spelling of the verb yażzuru is corrected into yazzuru (to recede, to ebb), we are compelled to emend al-barr ato al-baḥr, and then, the translation would be: « the sea ebbs from the land of Barāwa till the end of Sofala ». In case the mis-spelling of the original verb yażzuru is made yamduru (to split into crenulations or indentations, to be very irregular), and the rest is left as it is, then we have the translation we adopted.

49. Al-Azyab: south wind or south-east

In aş-Şiḥāḥ, al-'azyab is the wind blowing between east and south. In al-Qāmūs, it is either a south or a south-east wind. Tāġ al-'Arūs repeats al-Qāmūs with detailed references. In it and in Lisān al-'Arab, we have this interesting explanation: « The yemenites and those who travel from Gudda to Aden by sea. call

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It seems that al-Balliga is the rare urguza, since it is the only poem explaining as-Simākayn and Canopus exclusively, and Ibn Māgid says in the Jewel of the Jewels he wouldn't repeat the measurement of as-Simākayn.

37. Dubbān: four fingers

It is defined by Ibn Māğid in al-Fawā'id, p. 26, 1.11 to p. 27, 1.1; « Every finger equals 1/4th of Dubbān and every dubbān equals four fingers ».

38. Istagalla: culminate

Istagalla means to reach the highest position in the heavens, when speaking of a star or a mansion.

39. Al-Banat: the handle of the Plough

It is short for Banàt Na's. In astronomy, it stands for $\in \zeta$ η UMi or UMa. In navigation, it is used for $\in \zeta$ UMa only. Thus, the handle of the plough in as-Sufaliyya refers to the Great Bear Constellation exclusively.

40. Aš-šanīn: intermittent rains

Aš-šagīn in the original is wrong. It should be emended into aš-šanīn: intermittent rains.

41. Häyät: air currents of the monsoon

It should be hāyāt at-ṭūfān, depicted in al-Fawā'id, p. 336, 1. 1-8, that is the air currents of the monsoon. It is violent as said in al-Ḥāwiya. It is the plural of hāya, indirectly defined as violent wind in al-Fawā'd, p. 330, 1.6-7.

42. Fišt: shoal

It means an elongated underwater elevation of soft rocks. it is still used in Kuwait.

43. Aktăf: high crenulations

Dir'an: spits, sometimes bars

The original spelling, akdāf, should be emended into aktāf: high crenulations of the main shoreline; projecting spits; dir'ān, which are embankments with one end attached to the mainland and the other terminating in open water.

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stands for to set down in writing the time of an event without any interpretation, to record; and mu'arrih: chronicler, recorder.

31. Al-Măriza: mariza

It is a kind of fish, considered by the sailors as a sign of the approaching land.

32. Ad-Damīrī: (742 H/1341 A.D. - 808 H/1405 A.D.)

He is Muḥammad bin Mūsā bin 'Isā bin 'Alī ad-Damīrī (Damīr is a village in Egypt). He composed the book of «An-Nagm al-Wahhāg « of which one volume is an exegesis of the book al-Minhāg of Yahya bin Śaraf bin marā bin Ḥasan, al-Nawawī (Nawā is a village in Syria): 631 H/1233 A.D. — 676 H/1277 A.D.

33. 'Abdāl: substitutes

'Abdāl, plural of badal: interchangeable star, that is a star which can take the place of another star in measurement. The 'Abdāl are stars permitting mutual substitution.

43 At-talib: traveller, travelling pilot

Taliba means here to go in search of, to look for, that is to travel. Again, the traveller stands for the pilot himself who is responsible of everybody and of everything on his ship.

35. An-nafas: plus

Cf. note 25.

36. Tilka l-'Urğūza: that poem in rağaz meter

The problem is which poem is alluded to? In verse 139, the stars referred to are as-Simākayn, mentioned in verse 135 (Spica & Arcturus). In our book, « Stars of Arab Navigation» (in manuscript till now), we found that as-Simākayn are stressed upon in four qasīdas and in two 'urgūzas. But Ibn Māgid makes no difference between qasīda and 'urgūza and he uses 'urgūza for qasīda invariably. So, we can choose any poem dealing with them in particular: Daribatu ḍ-Dara'ib (The Jewel of the Jewels), As-Sab'iyya or the Seven Arts of the Sea, Al-Balīgā or the Eloquent Poem and al-Ḥāwiya.

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« You should know, said Ibn Magid again on page 236, that the measurements have some absorbing aspects of which we cite the following: when you get up, you must wash your face and eyes with cold water, improve your sit, and take the star to be measured at a distance of seven rhumbs away from the star just opposite to you, as Polaris and Altair. Also, the big tablets give a deficient measurement (minus 1/8th of a finger) and you should stretch your hand as possible; the four small tablets, an excessive measurement (plus 1/8th of a finger) and you should bend your hand as much as you can; the four medium size tablets, a precise measurement. This is due to the extension of the base of the horizon and to the narrowness of its top. You must understand we learned all the details (the fractions literally) of this art. There should be a string between the star to be measured and the tablet and another string between the tablet and the water too ».

26. Ar-raf': culminating, high in the heavens

Ar-raf', high position in Arabic, means culminating: the scientific term is istiqlāl. The meaning here is high in the heavens.

27. Munbasit: in horizontality, with excess

Munbasit, lying upon the ground in Arabic, stands for in horizontality: the scientific term is istiwà'. The meaning here is with excess, plus.

Qiyās nafis: excessive measurement Cf. note 25.

29. Ad-dira: the inhabited land.

Ad-dira is not used here as a scientific term. It is ordinary classic Arabic, meaning the inhabited land.

30. Mu'arrih: chronicler, recorder

Remembering the poem was composed in the 15th century, many terms had at that time or before special signification which may be different from the actual meaning: the verb 'arraha

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reference and the variations of their altitudes are compared to show how their altitudes increase or decrease with the altitude of the « standard star » or star of reference.

23. Muhtät: the prudent pilot

The spelling « al-minhāṭ » in the original text makes no sense. It should be emended into al-muḥtāṭ: prudent or wise pilot who foresees the situations.

24. Al-Hašab: tablets of measurements

The word al-hasab, plural of hasaba, stands for the tablets of measurement. Cf verses 63 and 83: hasaba: one tablet. It has another meaning in note 69.

25. Qiyās muḥkam: precise measurement

There are three kinds of measurements, or, to be accurate, of results of measurements, called nevertheless qiyās, measurements, metaphorically:

- Qiyas nafis, fihi nafas, nafisatu l-qiyas: excessive values, excessive measurements, or with 1/8° of a finger in addition to the units obtained; this measurement is given by the small tablets.
- Oiyās dayyiq, fihi dīq, dayyiqatu I-quyās: deficient values, deficient measurements, or with 1/8° of a finger less than the units obtained; this measurement is given by the big tablets.
- Qiyās 'āda, qiyās muhkam: ordinary measurement or precise, or not having any excessive or deficient value; this measurement is obtained by the medium size tablets.

Al-Kamāl is one of the simple instruments, used by arab navigators in the 15° century and before, to take the above measurement. It consists of 12 tablets briefly described by Ibn Māğid in al-Fawā'id, p. 60, 1.69 and p. 236, 1.2-10 and called al-Kamāl in the verse 696 of as-Sufaliyya.Some believe so.

« As to the conditions of the measurement, Māğid says in p. 60, the four big tablets should have a narrow width the four medium size tablets ordinary dimensions. The tablets have a couple of strings: one between the tablet and the star and one between the tablet and the water. The small tablets must be tangible ».

In navigation, mawsim as-safar, or al-mawsim shortly, means gathering time for it. And since the travel, is by sea and occurs at the same date or dates, depending upon favourable widnds blowing every year, it becomes fixed, periodic and known in advance all over the year. It is called the sailing season. The so-called solar year of the Arabian Nuruz (364 days) is used to determine the dates.

Open season denotes the time of safe sailing and consequently travelling; closed season, the period in which the boats or vessels suffer shipwreck if they set out for the sea.

18. Našara al-'alam or al-al'am: to fly the flag

Found in verses 27 and 458: leaving or arriving according to the context.

19. Nataha I-barr: steer for the land

Ibn Mâğid uses the verbe nataḫa (v 28), the name natḥa (v 33), the plural natḥāt (v 34), and al-mantah (v 532). Once, in verse 532, he has manādiḥ, but in all other verses, he repeats the previous terms.

In fact nataha and nadaha have the same meaning in navigation. Az-Zabidī says in Tāġ al-'Arīs, nadaha stands for to drive to as if by a shock. The pilot says: we drove to such coast, or we drove the ship to the coast.

20. Qiyas dayyiq: deficient cf. note 15

21. Qiyās nafts: excessive cf. note 14

22. Qayd: reference star

It is a method of measuring the stars altitude. The term qayd does not mean «fetter» as usual. It has a figurative signification: «a horse, is said qayd of zebras when he follows them and they can not escape, as if they were tied, said az-Zabidī in his dictionary».

Likewise, a group of stars, may be two up to four, must be measured, we suppose. One method is to take a bright star as

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This view is confirmed by the description of the beginning of the season of general rains, given by Kendrew (The Climate of the continents, p. 125, 1,2-12):

« The south-west monsoon sets, in, or, ... « bursts ». It is a change not so much in the direction of the wind, as in its force and in the whole face of the weather. The wind blows strongly from the south-west, very strongly over the sea; thick masses of cloud cover the sky and the air is saturated with vapor. A downpour of rain, with violent thunder and lightning, initiates the rainy and moist conditions that will prevail for the next three months. The clouds shelter the earth from the sun and the streaming rain helps to cool the air ».

I am inclined to see af-fūfān « the outburst of the monsoon », not the typhoon as related in Hobson-Jobson, p. 947-950.

12 Kawwa: to tack

To move in different directions or to tack.

13. Qālaba: to ply off and on

To sail in different directions in a lateral movement.

14. Raf': plus

When measuring the altitude of a star, the pilot may obtain an excess of 1/8° of a finger in addition to the units, for example 5 fingers and 1/8°, This excess, usually called nafas, is named here raf' or increment because of the versification.

15. Dig: minus

When the measurement needs 1/8° of a finger to reach the unity, it is said to be deficient, for example 5 fingers — 1/8°=5 fingers minus. the verb is daqa al-qiyas.

16. Al-Ğaws: bow

Gaws is a pure arabic term, mentioned in as-Ṣihāh/It means the chest, the front part. It has the same meaning in navigation: prow, bow.

17. Mawsim: sailing season

Wasama means to make a mark on, to put an identifying mark. The name mawsim in expressions like mawsim of pilgrimage or mawsim of markets, stands for the time of that event, when peoples gather for it, as if this gathering were a special mark. 11. At-tūfān: air current of the monsoon

In Arabic, tāfa means to go round, to envelop, to float. At-tūfān stands for heavy rainfall, overflowing of the land by water, anything that envelops a large space. Tūfān zalām al-layl: the veiling of the night darkness. This is mentioned in Siḥāḥ al-Gawharī, in Qāmūs al-Fayrūzabādī and in Lisān al-'Arab which adds: the intense night darkness is called ṭūfān.

In navigation, Ibn Māğid describes aṭ-ṭūtān in details, in his Hāwiya, chap XI, verses 61 to 72:

- « 61. Everybody should obey the orders of the pilot, my courageous man,
- especially when the signs of ta-tūtān, known in weather, appear.
- a-63. For instance, if the dirts obscure the sunlight or the moonshine, beware.
- 64. If the dirts last three days,
- 65. without any cloudless gap in the morning or in the evening; if the heat, the rain and the clouds stand firm:
- if the sea is agitated and if you see the crab; then, change the course of your ship without delay,
- 67. and go steadily to the nearest harbor. May God protect you from all dangers!
- b-68. If you see the dirts in the afternoon, that means the beginning of the wind blowing, as the experienced seamen believe.
- c-69. If you hear the thunder claps and see the rain falling not in big, but in thin and tenuous drops;
- if you see the lightning flashing very high, then the wind will certainly blow.
- d-71. If you see the lightning flashing upon the water level, the weather resembles that of the setting of the Pleiades:
- the wind blows in some places, in others, it does not.
 Comprehend and understand me. »

This text shows that at-tūtān is not the heat, or the rain or the clouds or the waves (verses 66-67), it is the expected wind after these signs, that is the air current of the monsoon (south-west or north-east), accompanied by the previous weather general features. reduced in the original verb: 'al' ama, and in the word mul'im. Lisân al-'Arab consider awlama and mūlim totally wrong. In fact, this verb and its derivatives are used in Yemen.

Besides, rih is seminine. Ibn Māğid makes it masculine.

8. Zām: zam

Az-Zām equals the quarter of the day or of the night: 12/4=3 hours. or the eighth part of a solar day: 24/8;3.

In navigation, it is either a unit of length (distance gone over in three hours sailing) or one eighth of a solar day, or, an angular unit (1/8° of a finger).

9. Al-fal: reaching the midway of the route

Fāla: to reach the mid-way. The verb fāla is not arabic. The seamen derived it from the noun of the Laccadives (fāl).

It is said in the history of Aden of Ibn Muǧāwir. « when tranvelling ship comes opposite the town (sic) of Socotora or Kudummul mountain, then this parallelism is called *al-fawla* » (p. 33, 1.11-13).

Also, it is reported in the manuscript of Bahrein, folio 61 r: « In case you like to know the number of Zāms you ran over from the Laccadives to the middle of the sea, I mean from the moment you flew the flag, it is customary to say fawwala, to pass from al-Fāl to Somaliland when Polaris altitude is two fingers precisely and Vega's elevation is 4 3/4 fingers at its rising, that is to arrive at the mid-distance, three arrows from al-Fāl and two arrows from Somaliland »

Similar explanations are given by Ibn Māğid in al-Fawā'id p. 358, 1.7-8; p. 339, 1.5-7.

Therefore, al-fal (name) in verse 11, means the arrival at the middistance approximately, and tafula anhu, in verse 10 & 453, is the verb.

10. Az-Zaḥan: rough sea or agitated sea

The name al-hazan in the original should be emended into az-zaḥan and this emendation is corroborated by the confrontation with the same word in verse 13.

Zaḥana 'an makānihi stands for, to move. Az-zaḥn, is the movement. It has no other meaning in navigation: agitated or rough sea.

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Anyway, Hann denotes a sector of the heavens reserved for a star or having the name of that star. It is not necessary that of its rising or its setting.

4. Rābi'u t-talāta: the fourth of the three.

This expression had been repeatedly used by Ibn Måğid, who explained in al-Fawā'id, what he means by these words. And first, who are the three,

«În that time — al-'Abbāsid's — , he said, the three famous men were Muḥammad bin Sādān. Sahl bin Abbān and al-Layţ bin Kahlān who is ibn Kāmilān. I saw that written by the proper hand of his grand-son, in a rutter dated 530 H» (al-Fawā'id, p. 14, 1.6-9).

These three men are sometimes called the three « lions »; « Aḥmad bin Māġid... the fourth of the three lions who are... » (al-Fawā'id, p. 10, 15-9). By the way, lion means here and in Yemen an intrepid pilot, no more, no less.

Ibn Mägid thought he treated the three with great honor and respect in saying he was the fourth of the three (al-Fawä'id, p. 16, 1.10-11). And he added: « I esteemed them when I said I was the fourth after them, because they lived before me according to the Hegira era » (al-Fawä'd, p. 18, 1.2).

Thus, Ibn Måğid means he came after them, chronologicaly speaking.

5. Ad-Diyar: sailing directions

Plural of Dīra. Derived from the verb dāra which means among other things to turn round or to move toward. Ad-dīra, as well as ad-dāra exactly, is the place set for in any displacement.

In navigation, ad-dira is the direction on which a ship is moving. But this direction is not a straight line; it is rather a strip or belt to follow and stay within.

6. Al'-Isbi': finger

The finger is the 224° part of the circonference of a circle. It equals 1'36'25' 57'. This is true for Ibn Māġid and applicable in all his measurements, in all his works. We are not interested in the opinion of Sulaymān al-Maharī for the time being.

7. Rih Mülim: favourable wind

The correct form is mulyim and the correct verb 'alyama, meaning to gather, to favor. The intensity of the hamza is

III -- ANNOTATIONS ON THE TRANSLATION

Al-Mağāri: courses

Plural of Magra. Derived from: garati-s-safinatu: the ship makes her way through the water. Therefore, magra means the way or path of a ship; her watercourse.

In navigational text, gara and magra imply a route determined by various guiding stars or groups of stars.

2. Al-Qiyasăt: meansurements

Plural of qiyas. Derived from qasa: to measure.

In navigation: qasa al-kawkab: to take the altitude of a star.

Then the measurement is the process of measuring the elevation af a star.

3. Al-'Aḥnān: points of the compass? rhumbs

Plural of Hann. This word is not found in any of the arabic reference dictionnaries. That does not mean it is not an arabic word since everybody knows these books do not contain all the arabic language. Nevertheless it is said In al-Qāmūs al-Muḥīt of Fayrūzabādī: Hanna l-qawma, waṭi' a maḥannatahum aw harimahum that is: to enter the withheld land of a tribe. Other meanings of al-maḥana: the middle of the house, a yard, the clear route. Al-hinn: the unloaded ship. The same explanations are given in Lisān al-'Arab al-Muḥīt of Ibn Manzur.

It seems to me that al-hann is an arabic word and means the withheld space of a star or its house as used in Astrology.

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| | L | L | |

COMMENT

In as-Sufaliyya, the latitude is given in fingers. The finger equals 1°36′25″57′, since the circonference measures 224 fingers according to Ibn Māgid⁽¹⁾.

Latitude North is obtained by the altitude of Polaris from eleven fingers (latitude of Gudda, Ra's al-Hadd and Zagad) to one finger (latitude of as-Sif aṭ-Tawil), and by the altitude of the Guards from seven fingers to four fingers approximately. For the african coast, Polaris is used from Gardafun (four fingers) to as-Sif aṭ-Tawil; the Guards, from Fist Muqbil (7 fingers) to Malwän (4 fingers).

Latitude South is measured by the altitude of the Guards from 4 fingers to one finger, then by the altitude of the Handle of the Plough from 12 fingers (latitude of Manfia) to one finger (latitude of the southern end of al-Qumr). In the african coast, Na's means $\epsilon \zeta$ of the Great Bear or η alone of the same constellation.

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⁽¹⁾ Al-Hawiya, chap. II, verses 54-55; al-Fawa id. p. 26.

3- Stars for finding latitude

| Alkaid η UMa Sabi' an-Na's | Alioth & Mizzer | The Guards β γ UMa al-Barāqid The Handle of the Plough: al-Parqadāa | Polaris a UMi Gáh | Proper Name Star Arabic Name |
|----------------------------|--|---|----------------------------------|------------------------------|
| 518 17, | 111, 413, 464, 469, 474, 537, 566, 570, 584, 684 467, 498, 499, 511, 541, 571, 578, 581, 588, 634, 654 | 15, 20, 170 174, 295, 243, 257, 417 283, 333, 413 | 7, 62, 76, 84, 85, 96, 104, 140, | Reference to the verses |

Position of the Manager described the Ver-

| Nuruz Calcadar | Bys.Calcadar | Rising Massion | Colminating Massion | Setting Massion |
|--------------------|--------------|---|---|---------------------------------|
| Southern Manaious | | | | |
| 1 | I3 Nov | The Crown | The Lion's Foreboard | The Picindes |
| 13 | 26 Nov | The Scorpion's Heart or Antares | The Lion's Mane | The Bull's Eye, or Aklebaran |
| 26 | 9 Dec | The Scorpion's Tail Shaula | The Lion's Tail or Deachola | Orion's Head |
| 39 | 22 Dec | The Ostrachus | The Bow's Stars | The Twins Feet |
| 52 | 4 Jan | The Void Space | Spica | The Twins Head or Castos |
| 65 | 17 Jan | The Goat's Hora | The Paint Stars | The Lon's Specie |
| 78 | 30 Jan | The W.B.'s left hand | The Scorpion's Stinus | The Lion's Eves |
| 91 | 12 Feb | The W.B 's left shoulder | The Crown | The Lion's Forehead |
| 104 | 25 Feb | The W.B.'s nght hand | The Scorpion's Heart or | The Lion's Mane |
| 117 | 10 Mar | Pegraus Shoulder | The Scorpion's Tail or Should | The Lion's Tall or Denehola |
| 130 | 23 Mar | Peganus Log | The Ostriches | The Bow's Stern |
| 143 | 5 Apr | The Whale's Belly | The Void Space | Spice |
| Northern Massions | | | | |
| 156 | 18 Apr | The Rom's Horns | The Gost's Hora | The Foint Stars |
| 169 | 1 May | The Ram's Belly | The W.B 's left head | The Scorpion's Stines |
| 182 | 14 May | The Plesades | The W.B.'s left Shoulder | The Crown |
| 195 | 27 May | The Bull's Eye or Heart or Aldeburgs | The W.B.'s right hand | The Sorpion's Heart, Antares |
| 208 | 9 June | Orion's Head | Peasurs Shoulder | The Scorpion's Tail, Should |
| 221 | 22 June | The Twins Feet | Pogress Log | The Ostriches |
| 234 | 5 July | The Twins Head, C&P | The Whale's Belly | The Void Space |
| 247 | 18 July | The Lion's Science | The Ram's Horas | The Goat's Horn |
| 260 | | The Louis Eye | The Ram's Betly | The W.B 's left hand |
| 274 | 14 Aug | The Lion's Forehead | The Plesades | The W.B.'s left shoulder |
| 287 | 27 Aug | The Lion's Mane | The Bull's Eye or Heart or Aldebarns | The W.B 's right hand |
| 300 | 9 Sep | The Lion's Tail or Denebola | Orion's Head | Pegasus Shoulder |
| 313 | 22 Sep | The Bow's Stars | The Twins Feet | Posson Lex |
| 336 | 5 Oct | Spice | The Twiss Head, CAP | The Whale's Bolly |
| Southern Missaione | | | | |
| 339 | 18 Oct | The Faint Stars | The Lion's Sasess | The Ram's Horse |
| 352 | 31 Oct | The Scorpions's Stings | The Lion's Eyes | The Ram's Belly |

| Proper Name | Star | Arabic Nume | Rising | Culmination | Setting |
|------------------------------|-----------------|-----------------------|-------------|-------------|-------------|
| Northern Manadons | | | z | X B | |
| The Plan's Horne | B T Ari | nn-Mark ^{on} | 1%-IR AN | 247.10 1-10 | 2012 |
| The Ram's Belly | n Di T | al-Borava | 160 1 May | Ame arrived | 307-10 04 |
| The Fleiades 17, 19, 20, | | a colular | four a -cos | dine re-one | 20000 |
| 27, 38 | and on f Tun | at. Theresis | 117.14 Man | | 1 3 5 |
| The Bull's Eye or Heart | o Tau | of Guing ye | 105-27 May | 107-77 A-1 | TACK Non |
| or Aldebaran | | | Case in his | Bry career | 100.00 |
| Orion's Head | A # 1-2 OH | al. Mao o | 208. 9 June | 300 9 9 | 26.00 |
| The Twins'Feet | A E Com | al Han | 251.22 June | 110.77 San | 30-22 Day |
| The Twins'Head or | a B Gem | - Charles | 234 5 July | der merr | 27.4.10 |
| Cartor & Pollux | | | desc a non | 200 5 000 | The A .ve |
| The Lion's Sneeze | # C# | an-Natra | 247-18 July | 200 St 062 | 65-17 Ja |
| The Lion's Eyes | # Ox + > Loo | at-Tard | 260-31 July | 10.11.02 | 78-30 Is |
| The Lion's Forehead | 9 1 7 L Loo | al-Gabba | 274-14 Aug | 365.13 Nov | 01-12 Path |
| The Lion's Mage | B v Leo | ar-Zubra | 267-27 Aug | 13-76 Now | 104-25 Peh |
| The Lion's Tail or | 6 Leo | an Saria | 300. 9 500 | 36 9 Dec | 117-10 Mai |
| Denebola | 1 | | den e men | 2000 | |
| The Bow's Stars | B T T B C Vir | al-'Awres' | 313-22 Sep | 39-22 Dae | 130-23 Mar |
| Spica | a Vir | as-similk-sl-A and | 326- 3 Oct | 53- 4 Jan | 143- 5 Apr |
| Southern Massaions | | | | | |
| The Faint Stars | z à Vir | aLCast | 339-18 Oct | 65-17 Jan | 156-18 A |
| The Scorpion's Stings | a a L | Ar-Zuhlena | 352-31 Oct | 76-30 Jan | M 1 491 |
| The Crown | B B R Spo | P-1141 | 365-13 Nov | 91-12 Feb | 182-14 May |
| The Scorpion's Heart | er \$600 | al-Oalb | 13-26 Nov | 104-25 Feb | 195-27 M |
| or Aptares | | 1 | | | |
| The Scorpson's Tall | A w Seo | nd-Stalin | 26- 9 Dec | 117-10 May | 208- 9 Jun |
| or Shaula | | | | | |
| The Ostriches | Yhanhort Sgr | an-Na ayim | 39-22 Doc | 130-23 Mar | # 22-122 Ju |
| The Void Space | 17 807 | a)-Balda | 52- 4 Jan | 143- 5 Apr | 234 S Ju |
| The Goat's Horn | aβ Cap | Sa'd ad-Dabit | 65-17 Jan | 156-18 Am | 247-18 Ju |
| The Water Bourer's left Hand | F H P Agr | Said Bula | 78-30 Jam | 169- 1 May | 260-31 Ju |
| The W.B's left shoulder | ₿ € Aqr +c1 Cap | Sa'd as-Su'od | 91-12 Feb | 182-14 May | 274-14 A |
| The W.B.'s right hand | T T T C Agr | Sa's, al-Abbrya | 104-25 Feb | 195-27 May | 287-27 A |
| Pegasus Shoulder | a B Pos | al-Fart al 'Awwal | 117-10 Mar | 208- 9 June | 300 9 50 |
| Business Francisco | | al-Part or Tank | 130-23 Mar | 221-22 June | 313-22 500 |
| Bor sweetlan | 7 o Peg | | | | |

COMMENT

In as-Sufaliyya, Ibn Māğid uses seven mansions only (2 southern and 5 northern) out of 28 distributed on a circle of 224 fingers, at intervals of 8 fingers: 14 are visible and 14 invisible.

These mansions constitute the guiding stars for the navigators from dusk till dawn¹⁰. Their names are given and their rising, culminating and setting times are looked to throughout two calendars made equivalent: the Arabian Nuruz year of 364 days and the Byzantine's or Rum's year of 365 days. The first of the Arabian Nuruz corresponds to the 13° day of November invariably. Every 13 days (14 days for the Lion's forehead only to compensate the difference of one day between the two calendars), a mansion rises, a second one sets, a third culminates in the northern hemisphere. Any mansion stays visible for 182 days after its rising, culminates above the forizon 91 days after its rising and under the horizon, 273 days after its rising. It rises again 365 days after its precedent rising and so onto.

Thus, for the whole year and for all places, the seaman has at his disposal 28 guiding stars or groups of stars. He knows well where to find them in the heavens and when they rise, culminate and set. Tables II & III outline these phenomena.

⁽¹⁾ Al-Hawiya, chap, III, verse 11-14.

⁽²⁾ Al-Hawiya, chap. II & III.

2- Guiding Mansions

| | | | _ | _ | | _ | _ | | |
|----|-----------------------------------|-----------------|---------------------------------------|-----------------------------|-----------------|-----------------------------------|----------------------------------|---------------------------------|-------------------------|
| | Spice | The Ram's Horns | The Whale's Belly or Mirach or Pisces | The Lion's Tail or Denebola | | The Twins Head or Castor & Pollux | Antares or the Scorpion 's heart | Bull's Eye or Head or Aldebaran | Proper Name |
| | a Vir | β γ Ari | β And | β Leo | | α β Gem | a Sco | c Tau | Star |
| 80 | as-Sarajan | al-Hut | Batn al-Hut | as-Sarfa | ad-Dira aš-Sami | ad-Dira | al-Qalb | ad-Dabaran | Arabic Name |
| | 31, 48 155, 156, 160, 268, 269 | 53 | 114-116 | 174-243 | 148 | 152 | 75, 77, 83, 87, 88 | 270 | Reference to the verses |

_ YY4 - - 9x -

TABLE I

| Proper Name | Star | Arabic Name | Declination | Ap Magnitude |
|--|----------------------|------------------------------------|-----------------------------|---------------------|
| Polaris or N.Star | a UMi | al-Gah | 89° 02' | 2.0 |
| The Little Bear | β γ UMi | al-Fraqid | (72°30′-71°30′) | (2.0-3.0) |
| | | al-Farqad ⁽¹⁾ | (72°30′-71°30′) | (2.0-3.0) |
| The Great Bear | αβγδUMa | an-Na's | (61°30′-52°) | (2.0-31/2) |
| Cassiopeia | | an-Naga | (59°) | (2.0) |
| Capella | a Aur | al-Bar | +45°57' | 0.09 |
| The Lyra, Vega | a Lyr | al-Kaşir ⁽²⁾ , al-Waqi, | +38*44 | -0.03 |
| Arcturus | а Воо | as-Simak, ar-Ramih'' | +19°26' | -0.06 |
| The Pleiades 17, 19, 20, 27, 28 | φedηf Tau | an-Nağm, at-Turayya | +24°15' Alcion | ĭ |
| Al-Tair | α Aql | Saqqaq al-`afaq | +08°44′ | 0.75 |
| | | or al-Hiran | | |
| Orion | inO 2 a 8 | al-Gawza | 0°20'-01°58' | 2.5-2 |
| Sirius | a CMa | as-Si ra or at-Tir | ~16°39' | -1.47 |
| The Crown or | B 8 # Sco | al-Tkiil | -25°-19°40' | 21/2-31/2 |
| Antares | | al-Qalb | -26°19′ | 0.92 |
| The Scorpion or Shaula | à Sco | al- Aqrab | -37°04' | 1.61 |
| Centaurus: |) | al-Himaran | -60°38'-60°08' | -0.1-0.61 |
| Rigel Kent | α Cen | | | |
| Agena or Hadar: | β Cen | | | |
| Canopus | a Car | as-Suhay! | 52°40' | -0.71 |
| Achernar | a En | al-Muhnit or | -57°29' | -0.49 |
| | | as-Sillibar | | |
| Canopus Pole | | | -70° | |
| (1) Al-Farqad, al-Faraqid, al-Farqadan may be used for each other in pocsy. (2) Al-Kätir is a persistant wrong spelling for al-Käsir | may be used for each | other in pocsy. (2) Al-Kat | ir is a persistant wrong sp | elling for al-Kasii |
| (2) A still and the still as the state of th | | | | |

⁽³⁾ A third possibility is as-Simak ar-Ramin.

fact, this is not always true, because the distance between two consecutive stars or groups of stars, is never 7 fingers as it should be (11°15'), and that α β Cen (al-Ḥimārān) sector comes before Canopus and Achernar sectors, although its declination is superior to theirs, and this fact is well known among the arab seamen". In this conjuncture, it seems that the Point-Polaris is of the utmost importance for drawing the sectors which lead to the guiding stars. Thus the sectors are believed to be a kind of frame of reference to show the beginners how to find and learn the positions of the stars of navigation that give the sailing directions. The skilled pilot recognizes them without any help or circle. The complete 16 guiding stars are listed in the following table, including the arabic names related in al-Ḥāwiya.

_ YT1 _ _ _ 89 -

Al-Fawâid, P. 136, 1.9-10: «al-Himarân are nearer than Canopus to the South Pole.

COMMENT

In the poem of al-Hāwiya, Ibn Māgid calls the Cards of Arab Navigation "The Circle of the Ships" and the "Circle of the housess". Its circumference measures 224 fingers". The position of al Gāh or Polaris is marked on it". A diameter, drawn through the Point-Polaris and the Center of the circle, determines two semicircles: the eastern and the western. Each of them is divided into 16 sectors of seven fingers (224/32 = 7) beginning from the Point-Polaris clockwise. Then, ten stars of the first apparent magnitude and six famous stars or groups of stars of visual magnitude varying between 2 and 3, are chosen, and their names are given to the sectors - not to the points - as proper names. The basis of this choice would be, theoritically, the apparent rising and setting of these stars in the sectors. In

⁽¹⁾ Al-Hawiya, chap, II, verse 14.

⁽²⁾ Al-Hawiya, chap. II, verse 54: «Mandil al-'Ahuan»: circle of the houses of the stars. Hann is arabic, not persian: it means dar or house, or main clear route, exactly as Mahanna. So, the circle is the circle of the stars 'houses or the circle of the routes. The first translation is preferred.

⁽³⁾ Al-Hawiya, chap. II, verse 55.

⁽⁴⁾ This may be done visually when Polaris is seen, or - by means of the astrolabe or the magnetic needle, said Ibn Māğid in al-Fwâ' id, p. 117, 1.4-5.

S-PERCES OF THE STARS OF ARTHONOMICAL NAVIGATION 1- Orientation stars or nebular

| Vega or the Lyra | Sirina | Sompion or Shaula | The Pleisones 17, 19, 20, 27, 28 Polaris or the N. Star | | Orion | Little Cloud (Dark cloud) | Little Cloud (White Clouds) | Nebecula Major or the Greater | | The Crown | The Masellanic Clouds | Rioli Kear & Assens or Helder | Contaurus: | | | Chaopus | The Little Bear | | The Civil hour | The Class Base | Application | Antern (Scornica) | Achemar | Proper Name |
|------------------|--|--|--|-----------|-----------|---------------------------|-----------------------------|-------------------------------|----------|-----------------------------------|-----------------------|-------------------------------|--------------------|----------------|-------------------------------|--------------------|-----------------|----------|---|----------------|-------------|-------------------|--|-------------------------|
| a Lyr | g OMa | λ Sco | e e a n l lau | | 100 1 0 g | | | | | B 8 # Sco | 1 | a a Can | a Call | | | a Car | p y UMI | | 4 | a A v A Illida | n 15000 | g \$80 | a Eri | Star |
| al-Kasir | 81-Th | al-'Agrab | el-Gith | al-Gewza' | al-Oswza | du or as-Sawda | at-Sabayit' at-Sa. | al-Bid or as-Se. | | PLATE DE | as-Sabáb | al-Rimáran | al-Plants | | as Sulasyd | Suhayi | al-Farqad | an-Nu ud | al-Banát | an Na it | nt-Similk | al-Qalb | al-Mulput | Arabic Name |
| 22 | 8, 41, 303, 354, 398, 456, 660, 663 | 101, 127, 182, 196, 207, 280, 286, 396, 476, 479, 514, 540 | 15,20 | 577 | | | 292 | 207, 288 | 476, 479 | 42, 101, 106, 128, 231, 319, 354, | 701 | 258, 280, 302, 362, 395, 662 | 127, 196, 207, 371 | \$39, 600, 653 | 359, 373, 407, 409, 424, 478, | 186, 470, 471, 643 | 639 | | 180 | 636, 639, 652 | 22, 527 | 663 | 167, 307, 315, 336, 408, 423, 451 454 | Reference to the verses |

PART THREE

INDICES AND BRIEF COMMENTARY ON THE TRANSLATION

- 36 -

- The ar-Ruhh Islands, the Dwarfs whose ancestor is Adam learn that .
- then the fractions in the measurements, and that sailing directions, or a reef, or a desolate island.
- 100. or the strenght of the water, or a harbor for anchoring. The good pilot is the one who can manage.
- Examine and verify everything, if you comply with my instructions. Safety is in them, o pilot. Make your choice.
- XVII F. 96 r. 15-16: ET: between 690-691:
 - You shall gain, through the Franks, knowledge about these routes and improve your skill
 - by the time and by repetition. They discovered new routes, be informed.
- XVIII F. 69 r, 19-20; ET: between 692-693:
 - I composed it (as-Sufaliyya) without any help.
 Absolutely not. And nobody asked for any clarification about it.
 - 105. Out of the way is the comparison between a pilot who inquires in the right way and the pilot who never finds anything to ask about.
- XIX F. 96 r. 22; ET: between 693-694;
 - 106. He, exclusively, granted me the privilege to voyage to all countries, guides and led me safely to my destination.

- YYO - -85 -

- 82. Thus, think over what I say about the unknown
- Do the same for the rutter of the ancient pilots to which the scientists refer no more.
- 84. The names in it have been altered and changed; the famous ones are the best for the pilot.
- XII F. 95 v, 14; ET: between 666 and 667:
 - But we heard a strange information from an intelligent, nice and experienced pilot.
- XIII F. 95 v. 20-23: ET: between 670-671:
 - You find al-Qušūš and aš-šuǧūr in that place, my colleague.
 - 87. Al-qurūš, the birds, al-qadd, and al-qarfā are so numerous, be informed,
 - that we imagine we are in the sea or we have mountains under us in the sea.
 - When we learned the knowledge of this coast, we doubted no more and are now well informed.
- XIV -- F. 95 v, 29; ET: between 676 and 677:
 - The Franks said precisely they discovered them (the islands) on the road.
- XV F. 95 v. 32-33; ET: between 677-678:
 - 91. The pilots set out from Sofala on the 170th day for
 - or before or after that date. Know that. It is the best sailing season.
- XVI F.69 r, 4-12; ET: between 688-689:
 - The sailing distance between the mainland and al-Qumr is 8 zams. This is true
 - for the southern end of al-Qumr, and agreed upon, my dear.
 - Another appellation, meant by al-qumr, is correct, listen to my information, because
 - I mentioned for it, what suits the voyage, and so many islands in addition to al-Qumr and so many dangers.
 - It would have been enough to relate the Women's Island in which the unlucky wrecked is thrown alone,

- 84 -

- 64. They pass there between mountains, and make a written report about the route conditions
- for whomever of them is returning from India or from their arrival point, understand my instructions.
- Sometimes, they meet in that place; in other times, they come one after the other,
- because it is the middle of the route between their country and the land of Malabar, take my description.
- Their voyage takes six months truly. Be informed of that. There are many islands on their way,
- The ships sail on the 90° day of the Nuruz for their outward and returning voyages. God protect you from the wreckage.
- Whatever island the Franks went to, they put ashore their men and ruled.
- Expect from them to comply with their method in their outward trip and when they return,
- so you might understand the events of the sea. All I have mentioned is written.
- I intend to improve your knowledge about the sea.
 Get a better learning after my death, o intelligent pilot.
- You shall learn their science, because they will not leave this region.
- When your days and nights become numerous, you shall not regret to die.
- If I could live till the event of the peace, I would acquire a praiseworthy knowledge
- about the entire northern Byzantine land and about China. And I wouldn't have had enough.
- XI F. 95 r. 24-30; ET: between 641 and 642:
 - If their names are taken from al-Ḥāwiya, the number needs only to be counted.
 - It may be said the measurement is ten fingers at Madwar and Diu. Understand as I do and profit.
 - It may be said Mayāham, Tāna and Dahrāwī, take my elucidation.
 - The measurement may be seven fingers at Säğir and Zafäri, understand my indications.

_ YTV _ - 83 -

- 48. Whoever tries to go to China, minds the dangers of his destination; otherwise he would have expected the fulfillment of his desire.
- The Franks returned from India to Zang by this road.
- Later on, in 906 H, they went to India, my brother.
- They bought houses and settled. They set friendly relations with the Zamorine and trusted him.
- Meanwhile, the people tried to guess their plans.
 They thought they might be conquerors or foolish thieves.
- the Franks used to coin the currency in the harbor of Calicut between their voyages.
- I would have liked to know what they were going to do, while all men were amazed by their performance.

IX - F.94v, 13; ET: between 619 and 620:

- The Franks, I mean the Portuguese, referred to us in that, and they gave him refuge.
- X F.94v, 25-34 to F. 95 r, 1-12; ET: between 630 and 631:
 - As to the Franks, they persisted in their voyages on that route until they became experts in it.
 - 57. I have been told that when they set out from their land, they sail by
 - 58. west and south for ten days with favourable and fair winds
 - till the vicinity of al-Hālidāt islands, where they saw some islands in front of them and at the entrance, as it was reported to me.
 - Then, they set their course on Canopus for ninety days, listen to my say.
 - The water's depth stays always eight « stretchedarms ». It never diminishes and remains quite above that figure.
 - until they leave as-Sa'ādāt islands behind them. Be informed.
 - Henceforth, they steer ahead for the coast of Ḥabaš and cast anchor safely.

_ YTA _ - 82 -

- He informed me about the expedition of the Franks who came from the Sudan's shore, through the deep sea.
- who defeated the Maghrebians and submitted Andalusia to their authority.
- Numerous islands, allied with the Franks, lie at their extreme northern border.
- This mainland stretches toward the east and bends toward the south, take my true information,
- as far as China frontiers, o my brothers, learn my description and imagine the land.
- At the right hand, extends the Turks, Georgians and Armenians land, as it was reported to me.
- There is nothing between them and the sea, but the Range of Mountains whose down-dropped easter side should be abandoned.
- At the extreme western border of the Franks, there are four islands, my dear.
- called Franğiya. They are elevated, large, high and visible.
- All Franks ancestors are from here. This people had never been defeated.
- He has an extremely powerful fleet of ships. Know that Venetia. my friend.
- is a market for all peoples living in the vicinity of the Byzantine Empire (Rum), but she is wealthier than them, o my relatives.
- I gave a true description of them. I did my best. I know not what will happen in the future after me,
- regarding triumph and assault matters between them and the inhabitants of India.
- VII F. 94 r, 2; ET: between 585 and 586:
 - The Franks ships went to it (Wašikā island). They attacked and conquested it.
- VIII F. 94 r, 12-20; ET: between 594 and 595:
 - the Franks' Ships went to W\u00e4zah in 900 H, o my brother.
 - They opressed it two full years. Then, they proceeded forward to India certainly.

_ ۲۳9 _ - 81 -

- the coasts of the mainland and all its islands. The mainland under their rule covered the regions
- as far as the confines of az-Zuqāq Sea and henceforth till al-Qumr, o my companions.
- They governed the islands lying seaward, at a distance of twenty zams, off the mainland of the heathens (=Frnaks).
- All these islands appear clearly in the west, my dear, at the southern shore of the sea.
- Sabta, which belongs to the inhabitants of 'Adwa, is allied" with them, I mean al-Hālidāt islands, understand my discourse.
- because they are near the western shore of that sea, at a sailing distance of twenty zams.
- My island (=Andalusia) is opposite⁽³⁾ to them, ahead of the Franks, this is the fully true information,
- because the inhabitants of these islands are white⁽⁰⁾ learn that.
- They come from as-Sa'ādāt Bay, at the east of al-Hālidāt, guide vourself.
- The mainland is allied with the government of all other regions. God protect you from all lands and wrecks.
- The Franks went to Calicut, take this useful information, in 906 H, even after.
- They sold and bought goods or ruled They bribed the Zamorine and oppressed the people.
- The detester of the Islam moved freely in Calicut and the people was frightened and anxious.
- The Meccan interrupted his voyages to the Zamurine's land; and Gardafun became assigned to the watchman

- YE+ -

⁽¹⁾ Watā is an arabic verb used in yemen only. It might allude to a yemenite inserter.

⁽²⁾ Manahumu in Arabic means in face of them.

⁽³⁾ In Arabic « red » means « white », when qualifying the races.

- The heavy surfs of Sofala's heads fell back and struck them.
- Their masts were swept away and thrown overboard, and their ships floated on the waters, my brother.
- They were drowned and could see each other. Know the sailing season of this land⁽¹⁾.

IV - F. 93 r, 11-16; ET: between 559 and 560:

- It⁽²⁾ shows that the Nile is divided into three branches, without any conjecture.
- One branch runs toward Nubia. It is a muddy stream, has soft water and is situated near Šanga, o my hope.
- The second branch goes to Kwāma. I have mentioned it before⁽³⁾ this is an indication —
- The third branch is the Egyptian Nile⁽⁴⁾. Trust me regarding the Gold, my friend:
- the inhabitants of the West and North used the Nubian gold, rely upon my information,
- to coin the currency called al-'Ašrafī. So, ask not anyone anymore about it.
- V F. 93 r. 19; ET: between 561 and 562:
 - It (the residence of the king of Zimbâwî) is a center of Gold^(s) be informed, and a region of slave traders, o inexperienced young man.
- VI F.93 r, 24-34 to F.93 v, 1-18; ET: between 565 and 566:
 - The Franks promoted our scientific knowledge and dominated the road,

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⁽¹⁾ Whatever shipwreck is referred to, how could the men see each other after having been suffocated by immersion?

⁽²⁾ No antecedent for the pronoun « it ».

⁽³⁾ It is not related in the previous verses, nor in any other poem of the author. In al-Fawa'id, Ibn Māğid (pp.281, 1.12-13) says; « As to the Egyptian Nile, it originates in Abyssinia » and that is all.

⁽⁴⁾ The contradiction of this false passage with the true one and its confusion are clear (cf. 596-600 ET). Besides, al: Aărafi is the name of various gold coins of the egyptian Mamealuks, used in Yemen too. The Portuguese gold coin at that time was the Cruzado. It is a pity to pretend that the cruzado and al: ¾safa are made of the nublim gold!

⁽⁵⁾ Bi in Arabic means region.

APPENDIX

THE FALSE VERSES INSERTED IN ASSUFALIVYA

- I F. 89 v, 13-14; ET: between 350 and 351:
 - In it (Zanzibar), for sure, you keep perceiving as-Simâkayn (Arcturus & Spica) high in the heavens — understand the precise meaning —
 - till the neighborhood of al-Mašwī island which is at left⁽¹⁾, o my brother.
- II F. 91 v. 7-8; ET: between 470 and 471:
 - But along the coast, all peoples sail in security by the rising of Canopus.
 - Cast the anchor during the day or at night in any reef you reach and spend the night.
- III F. 92v, 4-7; Et: between 525 and 526:
 - The Franks(=Portuguese) had been drifted toward it (Sofala) during the closed season, on St Michael feast⁽²⁾ as it was fancied.

⁽¹⁾ The sailing route comes from the north, passes through the channel of Pemba, then through the channel of Zanzibar, and between Zanzibar and al-Maswi. Thus Zanzibar is at left. So are the 16 sides at the south-west of Zanzibar. Al-Maswi is necessarily at the right of the route and not at left.

⁽²⁾ November 8, in the Orient.

- 696. I have given much knowledge till now, you will get completely used to it, when sitting to measure with al-Kamāl (100).
- 697. The reefs, the coast, the measurement, the wind, the sailing seasom and the people,
- 698. the anchorages, the islands sailing season, I verified precisely all that, listen to my advise.
- Sail steadily to the isles, bless the Prophet and take my recommendation.
- God bless in the morning and at dawn, the Chosen, the best of all men.
- 701. as long as the stars of the Great Bear revolve around the pole, and the Zang guide themselves by the Magellanic Clouds.

- YEY- - 77 -

[EPILOGUE]

66 - [The science in as-Sufallyya].

- 689. Think of the science in as-Sufaliyya, which guides you in the South, take my discourse.
- 890. You shall not find any other poem, dealing with that route and having a larger view in verified knowledge.

67 - [Number of verse of as-Sofallyya].

- as-Sufaliyya has seven hundreds verses, it exceeds them by one verse. Learn it form Ahmad as-Sa'dī.
- 692. Implore God, the Forgiver of sins, for me, in my life and after my death.
- 693. I know that route of the South so well that the pilot of the South himself used to ask me about it and about its reefs.
- 694. Everybody will trust anyone who observes visually.
- 695. The pilots believed in me and in the Guiding Prophet, and neglected those who saw the country.

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- 673. That is why the traveller sights them when he goes seaward for fear of the WSW wind, on his route to al-Hadrā island.
- In some years, very rarely, the pilots steer, in their travels, for Zanzibar,
- 675. from its back, not from the west side. So, comply with my instructions, or try by your own.
- 676. I explained it to you, o my friend; the reporter alone is responsible for it.

65 - [Salling reasons of the coast and the idea).

- Be informed that the sailing season, for the pilot of as-Sawähil, to al-Qumr and its isles, and then to Sofala.
- 678. extends from the first day of an-Nuruz to the 70th For the pilot of Kilwa, the season is on the 90th day.
- 679. But the sailing season to Kilwa is the 20th day, I have already mentioned (99) this season, my dear.
- 680. Sofala has only one season, profit of it and be wise.
- Regarding al-'Ahwar and al-Qumr, the expert pilots indicate a common season.
- which can be used two or three times every year, for the journey to Angazigā,
- 683. The best season for the outward and return voyages is on the 100° day of an-Nuruz, my dear,
- 684. but by light breeze, not by strong wind, for the return voyage, not for the outward, o pilot.
- 685. The additional season falls in the Dimāni, for the return voyage, not for the outward, o pilot.
- 686. The pilots of al-Qumr have two seasons for as-Sawâhil, o inquirer.
- I related all the courses, I missed none, If you ever cross this sea in your life,
- 688. you shall notice the truth of my say and deed, because this art is a great rational science.

_ YEO _ -75 -

655. But it lies in the east, o pilot, much farther in the sea than Tirī Rağā, o brother.

64 - [Sailing directions between the islands and the litteral].

- 656. The sea route from the islands to the littoral takes three days sailing at least.
- Some islands are close to the african coast, the pilot sets out for them by the breeze of the two sails (97).
- 658. Some others can not be reached by the WSW wind unless you depart from al-'Ahwar.
- But the crossing by the mild wind resembles that of Socotora, learn that.
- 660. Navigate from Kitāwa to ra's al-Milh by Sirius ≠, o pilot, this is my advise.
- pilot, this is my advise.

 661. If you set out from Mombasa to Damūtī, learn
- these descriptions,

 662. sail by Centaurus ≠. From Zanzibar toDamūtī, the
- 663. by the rising of the Scorpion ≠. The pilot of Kilwa sails to it by the rising of Sirius ≠. Learn and teach the pilots.
- 664. The pilots of Sofala and al-'Ahwar travel rarely to the islands discuss not.
- 665. If they do, they travel to the southern islands. Some of these pilots come once within years.
- 666. Some islands lie at the east of al-Qumr. A wise and well informed pilot told me about them.
- 667. These islands spread towards the north and extends in the east opposite.
- Barāwa, al-Gubb, Kitāwa and Mombasa, understand my say.
- The islands of Zarin are counted among them, be intelligent.
- 670. I do believe this information because I found not in az-Zang any
- 671. cross wave (98), o good pilot, which should increase here.
- They are separated from each other, understand my instruction.

63 - [Altitudes of the handle of the Plough in al-Quarr and in its islands].

- 640. Hereafter are the measurements of the islands, I mean which are known to the pilots
- and their routes to as-Sawāhil. I hide not my knowledge, my friend.
- 642. Take the latitude of Damūtī eleven fingers of the handle of the Plough. Then, at a distance of 20 zams from Wamizī, seaward, you shall be.
- 643. You reach the islands, if you sail from Kitāwa to Damūtī by Canopus ≠.
- 644. You realize your wish and find purchase and sale in these islands. Damutt is opposite to Diabwa in the
- 645. In Damütî the altitude of the handle of the Plough (96) is ten fingers and half, listen to my discourse, get not tired of my description.
- 646. Measure the altitude of the handle of the Plough ten ordinary fingers at Sa'dah, which is at the east side of all the islands, learn this useful utility,
- 647. because it is one of the islands of al-Qumr from which it can be seen, take my information.
- 648. Measure the altitude of the handle of the Plough nine fingers at Lingani which lies seaward, my brothers.
- 649. off the coast of al-'Ahwar, at a distance of more than 30 zams, take my word.
- 650. Till now, I have mentioned five famous islands in which there are sale and purchase. They are inhahited.
- 651. The desolate lands are lifeless. No need to tell anything else about them.
- 652. Al-Qumr ends where the Great Bear can no more be seen, o inquirer, take my indications.
- 653. The southern end (toward Canopus) of al-Qumr has a correct name, measure the altitude of the handle of the Plough in it, my friend.
- 654. The northern end is at eleven fingers of the handle of the Plough. It is twenty zams from the island of Munawwarah.

_ YEV _ - 73 -

[Chapter V]

[Navigation between the East African Coast, al-Quar and the islands] [Altitudes of the handle of the Plough, Salling measure, Salling directions]

62 - [Location of al-Ountr and of its islands].

- At the eastern side of the African coast, extending from Sofala to as-Sawāhil, nothing disappears in the far horizon,
- 632. in the sea, except al-Qumr and the islands situated between al-Qumr and the littoral precisely.
- 633. The most famous island is 'Anğaziğa, o my friend, and it is obviously at the west side of all the other isles.
- 634. It is at latitude eleven fingers and a quarter of the handle of the Plough. It is a large island, listen to me.
- Sail from Anğaziğā to anywhere you like in al-Qumr in the east. I tell you the truth.
- 636. The islands lie opposite to al-Qumr, at the setting of the little Bear ≠ and of the Great Bear. This location is sure, learn it.
- The southern end of al-Qumr is directed toward the pole, without lie.
- 638. So is Sofala. From al'-Ahwar, you go by the setting of the Little Bear ≠ by experience.
- 639. till the borders of al-Gubb and the land of al-Maqdis. From there, you incline to the setting of the Great Bear ≠.

- 613. Ar-Ruhh dwells in them, since they have lonely elephants (93) he watches.
- He flies carrying the elephant from the shores of the islands, take my information,
- 615. called « Fortunate Islands » according to trustworthy references, take these useful indications.
- 616. These isles are nearby the southern coast and close to the Eternal islands, understand the truth.
- 617. Every expert and clever pilot hnows them well: they are the beginning of the wilderness (94), comprehend my allusions.
- 618. These informations are sufficient about the inhabitants of these islands in my time, o my pilot.
- e-619. Next to these isles, in the north, take my information, some people as tall as the arm of the Egyptian are living.
- Some of them take refuge, o couragous pilot, in the kingdom of Munā of Manāwī.
- The center of gold above Sofala is called Wadiğra, take this true information.
- Steer for land opposite to it, o my friend. The last of the cities is called Siba.
- 623. which is at a walking distance of one month from the center of Gold toward the northwest, it is amazing.
- 624. Its inhabitants are naked barbarians in the inlands, they know not the Takrûr language.
- 625. There is a rough and muddy water between them and Takrūr. The Takrūr see them with naked eye very clearly.
- They wait on the coast for the ships setting sail for their sea.
- 627. and look at the fire and smoke, except those who saw the place.
- The mud contains drinkable water seeping from the Egyptian Nile, understand my discourse,
- 629. which mixes with the sea in the west. This is what was reported to me, my friend (95).
- 630. I retained only the true informations, reported by the experienced pilot.

- 594. Its inhabitants are white (91) because of the low temperature, my brothers.
- 595. till the range of mountains where the Egyptian Nile flows down slope eastward. So, take their description.
- b-596. The surface runoff of this range forms three streams: first, the Nile that flows toward the north
- 597. and has many cataracts whose number is known by God, the Creator and its Maker:
- 598. the second, the western stream, runs to the country of the heathens who are the barbarians of the inland of sofala.
- 599. The desolate and muddy Sudan lies, o pilot, between the first and second streams, o brother —
- 600. the third stream, the eastern, goes to Kwāma bay and flows toward Canopus≢, this is its sign.
- c-601. Kwāma is the center of Gold in Sofala of the rivers,
- 602. because the inhabitants of the countryside are isolated and scattered in a flat (92), wide, perfidious land.
- 603. full of reptiles and wild animals. The elephant in it is tame without being domesticated.
- 604. It equals the two thirds of the world and of all the creatures in the north, west and east:
- 605. thus one third is left to other peoples. Calculate on this basis the part and the excess.
- 606. There is no route for the traveller in it and the trees mix and interlace.
- Men circulate on the coast, on the west, north and countryside.
- 608. They keep passing by and approaching. And it is true, as it has been reported, my friend,
- 609. that they bring the zingiber and copper for the heathens of Sofala of the slave traders,
- 610. for whomever brings them the gold and silver, take my information.
- d-611. Everybody knows there is no other similar center, except in the west.
- 612. Nothing lies in their southern side but unknown islands in the sea, without any signs.

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- 577. there is a harbor sheltered from all winds, at latitude five fingers and a half « deficient ».
- 578. After this harbor, you encounter in the south, at latitude five fingers of the handle of the plough, as reported by experienced pilots,
- a country called [southern] Mulbayūnī. It is around the harbor, I mean Mulbayūnī. It is supposed so.
- 580. Then comes Malābatī which is said to be on the shore; so, no doubt about it.
- 581. It lies at latitude four fingers « excessive » of the handle of the Plough, as the pilots reported to me.
- 582. The islands of Sadbuwah, which are three, follow at the south.
- 583. The best of them is Wašīkā where ivory and ambergris are found.
- 584. In it, the altitude of Alioth and Mizar, I mean the altitude of the handle of the Plough, o my companion,
- is three fingers, as experienced and verified by experts pilots.
- 586. Nothing else is known, but the island of Wāzah. And no pilot sailed south of it.
- There are reefs, dirts and mountains, known by God, the Magnificient.
- 588. At Wazah, the altitude of the handle of the Plough is two fingers without mistake, my brother; then the land ends.

61 - [Countries and peoples bordring Sofala].

- a-589. This is what we know, my friend. The land turns there toward the west
- 590. till it reaches al-Wāḥāt coast, and comes at the west of at-Takārah,
- I mean al-Wäḥāt of Sudan and other Wäḥāt in that place.
- 592. A desert is inserted between al-Wähät coast and the country of Sofala. It was reported to me it has mud in it.
- 593. Its entrance lies in the west seaward; as it was reported by experienced men.

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- But Sofala is separated from Munā of Manāwī and from the residence (88) of the king of Zimbāwī,
- 562. by a walking distance of one mont from Sofala towards the north west, as reported by an experienced pilot.
- 563. This king governs it to the end of the world. No other peoples are equal to them in the south,
- 564. but the barbarians or the desolate lands, at the south of al-Wähät, as it may be calculated.
- I relate what regards the Sudan and the Magrib, as reported by an experienced man.

60 - [Sailing directions from Kwamn bay to Wage inland],

- 566. I go back to my first description: to latitude seven fingers of the handle of the Plough at Kwama, bay understand me.
- 567. Above Kwāma bay, there is a reef in the east side; beware of it when steering for the land and be sure.
- 568. It has sands towards the setting of Sirius≠, till you sight it clearly, take my information.
- 569. It is, o young pilot, opposite to Satāwah, whose inhabitants are barbarian heathens, learn my discourse.
- 570. Sofala is at latitude six fingers of the handle of the Plough. The islands called Satāwah are at latitude five fingers.
- At latitude four fingers is Manārah. Maqārah comes next towards al-Qumr.
- 572. Half of that reef splits into dirts and islets. I indicate all this to you, as was reported to me.
- But Sofala, the harbor of gold, is ruled by the king of Kilwa, discuss not,
- 574, I mean the coast, o inquirer, till the center (89) of the gold, take my indication.
- 575. Above Sofala and the coast, o brother, there is an apparent route to that (90) center of gold, improve your learning.
- At the southern side of Sofala, o brother, at two days sailing.

- YOY-

- Müma bay on the littoral, is opposite to [northern]
 Mulbayünī, whose population is
- 545. muslim. But at latitude seven fingers of the handle of the Plough, the heathens of Kwama bay abide. This information was reported to me by an informer.
- 546. This bay extends far inland and originates from the land of the egyptian Nile. Henceforth are the details.
- The inhabitants of the region between Sofala and Kağalwah are oppressive heatens.
- 548. They are called Munâ with an additional name, i. e. Munâ Batûr, being a great king and what a great pagan!
- 549. He has the centers of Sofala, because his country bounds on the eastern Sofala.
- From eastern Sofala, one can perceive the kingdom of the heathens which is next to Sofala itself (85).
- 551. The great king possesses the lands from al-'Ahwar to Zanzibar on the continent and in the sea, I myself inquired.
- 552. He owns the centers of the gold, because they are located in the country of the heathens,
- 553. with these vile remote inhabitants. The center of Nubia belongs to them.
- 554. The above people contact each other. A sea separates them. They have a terrestrial boundary
- 555. extending to the sea shore at the west. Experienced pilots told me about them.
- 556. They come in baršāt, (86) o courageous pilot, from a land at a distance of seven days, o brother.
- 557. They wait till they reach the heathens country, rather the western sea, this was reported to me by an informer,
- 558. who said they come, to dig the copper to pay with it the silver (87) of those dirty inhabitants,
- 559. from the end of the Frank's country and the West, understand my discourse and profit, my friend.
- 560. In their northern border, landward, there are some famous islands, in the west, o courageous pilot.

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- 526. But on the 170th day of the Nuruz, you have a unique season, take my guidance.
- 527. Sail by the rising of Arcturus and the Pleiades seawards, my brother.
- 528. As it is done from Aden to Hūriyā on the Dīmānī, learn the condition of the sea, my pilot,
- 529. till latitude eight fingers and a half of the handle of the Plough is reached and the wealthy coast attained.
- 530. Then, you steer for Mulbayūnī and for the coast next to it. No ship goes beyond it.
- 531. Before you sight Mulbayūnī, you perceive two mountains: one is red, the other white you can see with the naked eye.
- These mountains guide the pilots when steering for Mulbayūnī; this is a valuable information.
- 533. They guide them for Musanbiği, too. Stay away (84) from the shore to avoid hardship.
- 534. The sailing journey lasts about one month for all races and creatures.
- as the voyage from Qalhāt to al-Bawāţin, al-Ḥawr and Ğarūn, be intelligent.
- There is no end for the sailing season from Mulbayûnî to Kilwa, understand my poesy.
- Mulbayûnî lies at latitude seven fingers and a half of the handle of the Plough for all peoples.

58 - [Open sea sailing from Kilwa to Sofala],

- If you desire the right course from Kilwa across the open sea,
- 539. navigate due west and by Canopus≢, I mean its rising, understand my indication,
- till Mulbayūnī and stay away seaward; then incline to the Scorpion≢, which is your bearing
- to Sofala, at latitude six fingers of the handle of the Plough. Learn my description.
- Beware. Take no « deficient » measurement, or you commit a mistake and everybody will forget you,
- 543. under five fingers and a half which could be the farthest steering point, for fear of the south wind, my brother

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- 511. Steering for the coast is good from Kilwani to Kwama bay, at latitude seven fingers of the handle of the Plough.
- In good weather, you perceive a high mountain from Mulbayûnî to these steering points.
- No landmarks, special to that route, can be seen, for sure.
- 514. unless your course is by the setting of the Scorpion ≠. If you arrive at the bay at nightfall, approach,
- 515. and cast the anchor till morning, you shall find the inlet boundaries marked by woodlogs on both sides.
- 516. The fisherman of that region will come to you. Then you enter Sofala. Learn it.
- In it, you will observe that the altitude of Phad and Megrez is three fingers uniquely,
- 518. and that the altitude of Alioth and Mizar is exactly six fingers, in the season of the fundamental measurement. Take my description.

56 - [Sailing seasons from Kilwa to Sofain].

- 519. The best season, o my brother, from Kilwa to Sofala, listen to my information.
- 520. is from the first day of the Nuruz to the 50th day. Another season is the 20th day of the Nuruz.

57 - [Sailing seasons from Sofala to Kilwa].

- But if you set out from Sofala, you should do it on the 170th day of the Nuruz.
- 522. This is the best season of all that might come before and after it, be informed.
- 523. Before that date, you encounter the disastrous mild W SW wind (83); after it, this same wind becomes strong in these headlands.
- 524. You should sail eastward to the open sea, because the wind blows from an oppressive and exacting shore,
- 525. about the 200° day of the Nuruz, o pilot, and the rough sea occurs often in this time.

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- The water flows and rises (80) near the land, o pilot, understand my explanation.
- 495. Its flow leads you to the southwest according to the experienced pilots.
- Its tide resembles that of Cambaya. Understand the entry by this indication.
- Get in it, when the water rises, exactly like in the spring tide of Cambaya.
- 498. The best steering for the land is at latitude five fingers and a half of the handle of the Plough, for fear of the bad SE wind (81).
- 499. In case you steer for the coast between latitudes seven and nine fingers of the handle of the Plough, understand my recommendation.
- 500. The reef is high near Kwāma, recognize it, my brother: this is its sign.
- But it is low near Sofala. Sail, and commit not a mistake.
- to Sofala which has nearby landmarks not encountred close to any other place.
- 503. You perceive in front of you the coconut groves and the mounts of sands as signs.
- 504. You see the inlet near the emerging embankment, it has a two stretched arms depth, without lie.
- 505. Enter Kwâma bay during the rising of the water, as it is exactly done in Cambaya bay.
- 506. The inlet is marked by woodlogs till the bay, they were put by a man hoping a reward from God.

55 — [Coestal Sailing in small heats from Kilwa to Kwama bay and Sofala]

- If you desire to set out from Kilwa to Kwāma bay, sail along the shore, o pilot.
- 508. In case you are in a small boat, you shall follow a fair route to (82) al-'Aḥwār according to your own experience.
- The winds might veer on your way, my companion; that is why.
- you should run seaward, my pilot; then steer for Kilwānī.

54 - [Sailing directions from Wamizi to Kwima bay and Sofala].

- But if you set out from Wamīzī, leave the land and the shore seaward,
- 478. sail one day or four zāms due north and by Canopus ≢. Take my word.
- 479. Then aim to the Scorpion ≠ and to the Crown ≠, and penetrate in the open sea at nightfall on these bearings.
- 480. for two or three days, in the well equipped ship passing there.
- 481. You shall find along your route that the water becomes shallower near the coast, without lie.
- 482. When you steer for the land ahead, you meet a reef on Kwāma bay, take my indication.
- 483. Keep that reef at right till you pass it; sail along the coast and follow the shoreline (77)
- 484. till you reach Sulanyat which is a reef above Sofala, my friend.
- 485. All Sofala shores are sandy, o pilot, they have neither mud nor springs.
- 486. Keep Sulanyāt reef at right till you pass it, o my friend and hurry up to the inlet with joy.
- Get in the country near this entrance; you shall see it with your own eyes.
- 488. The water whitens here. The sounding (78) is used till the eastern border of the coast, take my instruction.
- If you desire to anchor, do it. The land is green, anchor and enjoy it.
- 490. But the waves inspire fear among the emergent rocks, because they are exposed to the winds, take my advise.
- The waves might throw you towards Kwāma of the Pagans. Therefore, recognize daylight.
- In case of necessity, cast anchor in Kwama till dawn, and beware
- because most of its winds are southern and the water has a monthly tide (79), my dear

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[Chapter IV]

[Constal and open sea mavigations of the country of Sufala] [Altitudes of the handle of the Plough, Sailing directions, Sailing seasons] [Land's end, Countries bordering Safala]

53 — [Coastal sailing from Kilwa to Wamini Mulbayuni and Sofala].

- If you desire to sail the coast, from Kilwa to Sofala, you should
- 469. set out, my dear, to Wamīzī, situated towards Canopus ≠ pole, at eleven fingers of the handle of the Plough.
- 470. Wamīzī is an island whose inhabitants are muslims. The pilots navigate to it by the rising of Canopus ≠.
- They keep sailing by that bearing (Canopus) till
 latitude nine fingers of the handle of the Plough, I
 mean precisely till Šinžaži.
- whose inhabitants are muslims too but governed by the Pagan. Above it, there is a long ramified reef.
- 473. Mulbayūni is seen after Wamizi towards the south pole; it is the place of silver and ambergris.
- Mulbayūnī is at latitude eight fingers of the handle of the Plough exactly: I explained it to you clearly, o young pilot.
- But this latitude is «excessive». Understand these rules I am giving you.
- 476. Set sail from it to Sofala by the setting of the Scorpion ≠ and incline towards the setting of the Crown ≠, be a perfect sailor.

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Improve your course and be courageous.

51 - [Sailing directions from al-Hanné to Kilwa of the kings].

- 450. Sail to Kilwa from the island known as al-Hanaš,
- 451. due south and by Achernar ≠ absolutely, till you face the northern mountain
- 452. Then, you shall sight the northern end of Kilwa's reef, close to you.
- 453. Navigate parallel to that reef till you pass it, and run seaward, you get safe out of it.
- 454. Al-Hanšān island is located at a distance of two zams sailing by Achernar ≢, o pilot.
- In case you sail along the right side of the reef till it turns, beware of it.
- 456. Navigate when it turns by the setting of Sirius **. Enter not the west of Kilwa which is an unknown place without landmarks,
- 457. till you pass aside, and Kilwa comes at your left, then you shall enjoy security.
- and fly the sails of arrival safely. Kilwa of the kings shall be in front of you.
- 459. Then, keep all the houses of kilwa of the kings
- 460. in the bow of your ship while you are looking and the people are waiting in the harbor.
- Congratulations for this wonderful voyage and good fortune before you get the red gold,

52 --- [Stellar altitudes].

- 462. Kocab's altitude is two fingers in Kilwa; it is a correct scientific measurement.
- In it, the altitude of Phad and Megrez is eight fingers, pay attention.
- 464. The altitude of the handle of the Plough is 11 fingers and a half exactly, if you sail seaward, it is enough.
- 465. But at Manfia, guide yourself by Pherkad, I say,
- 466. when α β Cen are culminating, its altitude is four fingers and a half exactly.
- 467. And the altitude of the handle of the Plough is twelve fingers «excessive», inform the pilots.

- 430. Waqulah is a round island, o brother, with exuberant vegetation which can be seen with the naked eye.
- Its coast is white. Manfia can be perceived from it.
 Take my recommendation about it.
- Before you reach Waqulah, you meet an island with trees, tall and big.
- 433. It closes the access to the reef of Waqulah. Leave all this at left and stay away.
- c-434. The name of the southern island is Kilwa Tûnî. The shore is not safe here.
- 435. In the closed season (72), the pilots sail from Manfia to these two islands, which have routes
- to Sanğ Sanğuwā at your right. Listen to my explanation and understand my purpose.
- d-437. Then, they sail parallel to the back of the reef as small boats do, by side wind.
- 438. All along that distance, the course (73) is at your left. Cast the anchor wherever you wish.
- 439. The reef has indentations (74) in which the waves break, you may shelter in some of them,
- as in the main course mentioned for aš-Šarqā island in the north.
- 441. Know that if you leave Sang Sanguwa behind you and at your right hand, you should incline to get out safely.
- Approach and anchor in al-Hanaš island. Set out of it at dawn or at dusk, if you like,
- 443. because it is the last of these islands in the south. Be informed.
- f-444. But before Šanğ Šanğuwā, you find many unknown narrow submerged embankments (75).
- The shallowest is three streched arms deep, without lie.
- 446. As soon as you leave the embankments, you see the mountains of Kilwa clearly.
- 447. There are ridges (76) above Šanğ Šanğuwâ. Beware of them, they are on the route.
- 448. At the south of al-Hanšān island, a reef lie and a rocky ridge stands at its west side.
- 449. Beware in their neighborhood in the darkness

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49 - [Aktitude of the handle of the Plough].

- 413. The Guards can not be seen any more in it and the altitude of the handle of the Plough is truely twelve fingers.
- 414. The Zang pilots said the handle of the plough altitude is more than twelve fingers. They lied. This is impossible.
- 415. In Manfia, the elevation of Kocab is two fingers and a half. I measured it with naked eye.
- 416. The altitude of Pherkad is three fingers and a half, o my brother, and whoever measures it not, shall miss it.
- I need not measure the culminating star, the Guards admit no other presumption.
- 418. If Agena and Rigil Kent culminate over the Southpole, measure them, o man!
- If God lead you, o pilot, to the east, seaward, at the end of the sailing season,
- when you have sailed from the coast of India, and if you have been drifted by a contrary current.
- 421. take the corrected measurements, and measure as I said in my recommendation.

50 - [Salling direction from Manfin to al-Hanni island].

- a-422. If you desire to sail from Manfia to Kilwa of the Kings, your course is
- due south and by Achernar ≠. You shall meet a reef and a nearby small rocky ridge,
- 424. called M\u00e4n\u00e3\u00fc by the Zan\u00e3 \u00fc\u00e4bilon. The reef extends towards Canopus ≠,
- 425. till the western side of the island, I mean the famous Kilwa, o young pilot.
- b-426. But at the southern side of Kilwa Haswandu, all the islands lie at your left.
- 427. There is a route for the traveller between them. When you leave them behind, you see two islands:
- first Waqûlah which has a long reef extending from its northern side toward its shore,
- and containing emerging rocks, o pilot, resembling al-Matrad, o man.

48 - [Sailing directions from at-Sarca' to Manfiel.

- Navigate from aš-Šarqā' to Manfia by Centaurus ≢
 Another route goes
- by the Scorpion ≠ at the beginning. Follow either one, o friend,
- because there are many shallows (70) you should recognize surely in the middle of that route.
- 398. Whoever sails from aš-Šarqā' island by Sirius ≠ and Orion ≠.
- take my word, steers for the islands of the sea called Mašangūbīlī, as was reported to me.
- 400. and Wāmalūl—it is the nothern isle— and the southern isle, near Fāmia.
- 401. is called Flüluwa, and is covered with trees and mud (71). There is a route convenient to my purpose, between these islands.
- They are considered harbors for every fair wind.
 The experienced pilot sees them from Manfia.
- 403. Manfia is an island you perceive ashore from aš-Šargā', learn that and remember it well:
- they are near the coast, my friends, like Qays and Hindurābī.
- 405. In case you have sailed a long way in the open sea and that night had fallen, keep going.
- When you miss Manfia, harbor in Wāmalūl and Flūluwa, o friend, then tack to and fro
- and sail by Canopus from them to Manfia. God protect you from the harm of the wreckage.
- 408. But, there, the sailing direction along the shoreline is due south and by Achernar ≠ 0 my friend.
- This course has much dirts. So, incline towards Canopus ≠, o expert.
- 410. Before you reach Manfia, you shall meet an emergent rock and a reef. Leave not the embankment.
- Zigzag at left and at right till you reach al-Māšiya.
 From Māšiya, sail due South
- to Manfia. Manfia is a good island, with double indentation, triangular shape and population.

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- b-376. Some pilots leave the reef at right and steer for Manfia steadily.
- If you like to leave it at your left, sail on the route as you like.
- 378. Cast the anchor wherever you wish. Before the reef, you perceive on the coast the landmarks
- 379. of seven roads (68) with people settled in two villages near them, close to a head.
- 380. Near this head lies a big bay which can be entered and constitutes a good shelter for small ships (69).
- 381. You may get in it by the south fair wind, till the two villages near the shore.
- Big ships find not in that bay a suitable harbor for them, as little ships do.
- c-383. The two villages may be recognized by their position near the inlet, because they are land marks.
- 384. It is reported that the northern village is called Sili and the southern Mulali.
- You perceive from them the reef of the inlet. Get in safely and cheerfully.
- 386. The depth of the water there is five or six stretchedarms, I mean the average, listen to my description.
- description.

 387. But at its borders, the water is shallow in the reef itself and near the shore, o companion.
- d-388. Before the reef, there is a small island ahead of Kwāla; you can steer for it.
- 389. If you face it there, be careful, because submerged rocks lie into the water.
- 390. Beware of it: the swell of the sea breaks ahead on the rocks producing white foam clearly.
- 391. Kwâla comes next to the submerged rocks, o brother. All these landmarks are at left, take my recommendation.
- 392. Then, aš-Šarqā' island follows due the south pole.
- It is called Ikûhâğündah in Zang language. This
 information was reported to me by an experienced
 pilot.
- 394. The sailing distance from the beginning of that course to aš-Śarqa' is one zām, be informed.

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46 - [Salling directions from al-Maiwi idend to Sunda islands].

- and keep going by the rising of Canopus ≠ to the island of al-Kâfir, even at night,
- for two-zāms by fair wind. It is a clean course which has no dirts at right or at left.
- In good weather, you perceive al-K\u00e4\u00e4fir and Zanzibar from the top of the mast. Hold on your course.
- 362. If you desire the sea route straight on, set your course by Centaurus ≠
- for two zāms by fair wind till al-Fil head, count the two zāms precisely from the islands
- called Sundā, whose number is five. Anchor at their southern side.
- Sundā is their name in Zang language. If you desire them, take my recommendation:
- 366. al-Käfir island which is considered one of them, lies far (66) from them, at their southern side.
- If you wish not to go to al-Kāfir on the outward voyage, leave it; but on the return, you must enter it.
- 368. The Arabs gave this isle its name, and it is well known.
- It has always small boats which come from the littoral, be informed,
- 370. because it is near the shore. In fact, it is ahead Sundâ islands, o my friend.
- The course from al-Kāfir to al-Fil head is by Centaurus . Al-Fil head is, o traveller,
- 372. a cliff on the shore, at the north, o watcher of the course (67), cast the anchor in it and sleep.

47 - [Sailing direction from Sunda to al-Sarqui",]

- a-373. If you sail by the rising of Canopus ≠ from Sundā' straight on
- till they disappear out of sight, incline due south knowingly,
- 375. you shall reach al-Fil head, then the reef which is the inlet reef. Adjust your bearing and try.

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- It is one day sailing transversally, I mean widthwise, take my indication.
- But its shape is considered round when calculating the route.
- 344. It has no true sailing direction. It is difficult to reach. Learn this information.
- The northern end is called al-Hamam and Minsar heads. Learn it.
- Its southern end, o brother, is called Smäkmand, mv dear.
- But the head in the southwest is named Wasinâ head, the experienced pilots reported to me.
- 348. Stay away from Zanzibar; sail parallel to its coast, and look at it with your own eyes. How wonderful it is!
- 349. See Māğa at left, it is a head on Zanzibar coast.

45 - [Sailing directions from Zanzibur to al-Malwi island].

- Sail one zam from Mäga head, you reach al-Mašwi island. It is an islet.
- You perceive it clearly from Zanzibar. There are many islands at left between Zanzibar and al-Mašwi.
- Leave them all at left. Cast the anchor at nightfall, o traveller.
- 353. Al-Maświ has thick vegetation in the west (64). If you pass by night in this place, hurry up and move away from it.
- 354. When you face it, tack to and fro a little bit till your course comes by Sirius ≠ and the Crown ≠
- An emergent rock (65) and a long reef appear above the water near al-Mašwī, at its northern side.
- Al-Mašwi has an anchorage sheltered against the WSW and SW winds. If you like to anchor in it, approach.
- Sail from Zanzibar to this island by the rising of Canopus≠, understand my interpretation.
- If you wish, cast the anchor, or, in case you have nothing to do in al-Mašwī, navigate by the south wind.

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- Wherever the night falls, cast the anchor in water seven stretchedarms deep, or so.
- Proceed till you have the houses in sight at its described extremity (62).
- c-326. Then, you shall see all the isles, o traveler, keep two of them at left.
- All these isles are at right and in the west of Zanzibar. Cast the anchor in Māšiya island, o my companion.
- 328. Māšiya is white and a harbor sheltered from the south and W SW winds. Be glorified the Creator and Organiser.
- In it, Canopus and Capella altitudes are equal, they were verified.
- 330. The pilots compute them. I measured them there with the astrolabe.
- 311. I found their altitude 39 degrees as usual.
- d-332. These islands are large, I mean al-Ḥadrā' and Zanzibar.
- 333. Their backside is clean. They lack no water (63).
 The Guards altitude is one finger between them.
- 334. The northern end of al-Hadra island is at latitude one finger and half of the Guards, and lies opposite to Wāsini. This is my description.
- But the shoreline from Wäsini to Zanzibar, is surely directed
- due south and towards Achernar ≠. It forms dirty reefs. Approach it not.
- e-337. Some pilots leave the reef at left, I mean of Wāsīnī, discuss not.
- Then, They will not have an outlet to the exit near Zanzibar, take my calculations.
- Many islands lie near Zanzibar, they count about sixteen, learn it.
- They are located in the southwest of Zanzibar among dirts, o my companion.

44 — [Description of Zanzibar].

 Zanzibar is a large island, divided into forty ancient townships.

[Chapter III]

[Navigation purallel to the littoral of sz-Zang and al-'Ahwar] [Altitudes of the Guards and the handle of Plough. Stellar elevations] [Salling directions]

43 - [Sailing directions from Wasini to Zanzibar]

- a-314. If you set out from Wäsini, my brother, hold on the true course
- due south and by the setting of Achernar ≠, o diligent pilot, till you reach the high Ras al-Ḥamām
- of Zanzibar which has, be informed, another head at its east side, called Minšår.
- These two heads are opposite to the southern end of al-Hadra' island, exactly in the east and in the west.
- There is a route between al-Hadra' and Zanzibar for the pilot travelling to al-Qumr or Sa'da or the isles.
- 319. by the rising of the Crown ≠ precisely. It is the current of the two sails, my friend.
- Be careful, steer not for al-Hadra island for fear you run against Minšar head, without lie.
- The pilots avoid the sea between Minšār head and al-Hamām head
- 322. because of the dirts and the submerged rocky crests (61). Incline to the right, you shall be safe.
- b-323. When you pass al-Hamâm head, sail parallel to Zanzibar. Leave this island at left.

- If you stay in that place, you see three submerged rocks (59), o pilot,
- little ones, and high, off Mombasa. Look at them in the sea and beware,
- so you enter the harbor safely, without any doubt, as a pilot sure of himself.
- Enter Mombasa and enjoy the pleasures of the voyage. Mombasa has the trade and the profit.

41 - [Sailing direction from Barawa directly to Washii].

- If you cross the sandbars of Barāwa, understand my explanation:
- 302. sail by the setting of Centaurus≠ exactly twenty zams complete.
- and you perceive Manği and some islands in the far horizon. Navigate and hold on
- the setting of Canopus≠it is a good heading till you reach Wāsīnī and his passage.

42 - [Salling direction from Mombasa to Wasini].

- You sail from Mombasa to Wâsini one zam and a half exactly.
- Then you incline towards the famous Achernar ≠ till morning. Depart not from my advise.
- I watched and verified it in my testing experiments.
 Navigate by these courses, you shall succeed.
- Sail parallel to the west shore of al-Hadra island, because there are dirts (60), o my companion, at the eastern side
- 310. of its northern end. So beware, sleep not here at night, and stay awake.
- 311. So is Wāsīnī: it has continuous dirts till its southern tip, o my brother.
- The Zang pilot said: the dirts extend at its northern end; keep it in mind.
- 313. But I think this is wrong, o my friend. Listen to my instructions, and you will have the right route.

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- pilots say Melinda's head appears jutting far in the
- But the breeze is near above the coast, beware and approach it not.
- 283. At Melinda, the altitude of the Guards is two fingers and a half exactly, take my description.
- You see there the beginning of Kalfi's mountain which is followed by Mangi Hazan, learn that.

39 - [Description of the Magellanic Clouds].

- All these places are at a distance of two days sailing from Batta, without lie,
- the ship's bow directed towards the White Clouds, and during the night toward the Dark Clouds.
- 288. There are two White Clouds, o brother: one is visible to the naked eye.
- 289. the other one is faint. The position of the White Clouds is between Canopus and Sirius:
- But it is at a distance of ten fingers from Canopus, listen to my discourse.
- 291. that is one arrow (57); and at a distance of two arrows from Sirius and you can see both of them in straight line with naked eve.
- 292. The Dark Clouds are in the Cross, and may be observed at the end of the night, listen to me.
- in the season in which the pilot of Sawähil travels, during the Tirima (58) and enters Batta's country.

40 --- [Sailing directions from Melinda and Manji Hazan to Mombasa].

- Minwäfa bay comes next to them, and Mombasa follows south of them
- 295. at latitude two fingers of the Guards, without lie. It has many visible stars whose altitudes can be taken as references.
- It is an island, o brother, and its bay is at the north of Minwäfa, learn its explanation.

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- Kitāwa lies at the right side of the inlet, understand my discourse.
- The land of Lāmū comes at left. Lāmū was an inhabited island in that place.
- 268. In Lămû and Kitâwa, the altitude of Spica is observed to be five fingers in the rising, exactly like the elevation of Hamal.
- 269. The altitude of the famous Spica and Acrux is measured ten fingers. Listen to me.
- The elevation of Alkaid, Al-Debaran and Capella is seven fingers measured by the naked eye.
- The altitude of Alkaid and Arcturus is equal to the fundamental measurement. Take these useful instructions.
- The altitude of Alkaid and Agena is six fingers and a half, learn it.

38 — [Salling directions from L\u00e4m\u00fc\u00e4 and Kit\u00e1wn to Melinda and Man\u00e3\u00e4 Hazan].

- a-273. When you leave Lāmū and Kitāwa behind you, set out to Šaklā, o Friend. Šaklā is a little bay, o inquirer.
- Beware of it by E N-E wind, o pilot. The land turns certainly at Šaklā.
- b-275 and you see, straight in front of you, Zalwilül, which is an island, isolated
- off the coast. Seaward of it, there are reefs which have anchorages sheltered against all winds.
- After Zalwilül, there is a new bay at a distance of Qalman, beware of it and sleep not.
- c-278. Then comes Kaluma head which is an anchorage sheltered from W S-W winds (55) and a southern cold observatory (56)
- 279. There is not a single course along this shore: you can see many bays and heads.
- In case you run seaward of themby the Scorpion
 = and αβ Cen
 =, sail and try.
- d-281. After them, you perceive Melinda first, and some

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- 248. you obtain six fingers and a half in as-Săriq country and in its islands, learn their position.
- 249. It is six fingers minus a quarter at Batta. And by five fingers and a half, exactly,
- you reach Lāmū and Kitāwa, measure it and learn my information.
- I need not explain it to the reader, I am afraid I might forget any instruction, learn that.
- 252. because the altitude of Kocab at al-Hadd, gives twenty one fingers and a half (51).
- c-253. So, use the graduation for al-'Aḥwār finger by finger, for each tiriffa, while sailing.
- 254. because Kocab culminates (52) above the pole and the pole admits no mistake or lie.
- 255. but only «excessive» or «deficient» measurements (53). I tested and verified it accurately.
- I found that its altitude is four fingers plus three, but it is rather approximate, and it is surely approximate in al-Hadrā.
- d-257. In case you see not the Guards here in the season of the fundamental measurement (54) while in trouble,
- measure the altitude of Kocab and αβ Cen. Take my description.
- 259. because this measurement is correct for each finger of latitude, and the origin is clear to you. So, make the calculation
- from al-Ḥadd to Manfia; it would not differ by one finger. This is my indication.
- If this measurement is possible, do it. And let us return to the explanation of my previous subject.

37 - [Salling directions from Batta to Lamit and Kitawa].

- The pilot going south, from Batta to Lāmū, should follow the littoral and the reefs.
- 263. The land turns from Batta toward the islands of Kitâwa and Lāmū which have landmarks:
- 264. I mean high sandbars as true signs, and they have the same inlet in the same bay.
- But this bay is broad and extends till Wāzīnā, I have been told.

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- First of all, you meet in that recess an island off al-Gubb country,
- 233. at a distance of four zams exactly by south wind (49).
- Between the island of Šīkā and Malwān, there are also rour or five zams. Memorize my poesy and listen to it.

35 - [Sailing directions from Malwan to Batta].

- From there to Batta, the distance is six zams, all along the shore. Henceforth is may description.
- 236. because above Batta, there is an island called Faza 'all and it is known by this name.
- There is a route between Fäza 'alī and the coast; seaward of it, there is a reef extending farther
- to the neighborhood of Wâzīnā. The inhabitants are like those of as-Săriq country inland, o vigourous pilot.
- Off this shoreline, there are countless islands, big ones and little ones, my dear pilots
- scattered just in the middle of the distance separating Malwan from Batta.
- The land of Batta is the country of a generous people, and of the cats called az-Zabād.

36 — [Altitudes of the Guards].

- 242. If you desire to know the stars rising in that region (50), have the famous measurement that never fails.
- a-243.At Barāwa, the altitude of the Guards is four fingers as Denebola; it may be seen, this is a sure information.
- The altitude of β UMi (Kocab), when culminating, is eight fingers and a half without mistake.
- 245. At al-Ğubb, it is seven fingers and a quarter. In the country of Malwan, it is on that occasion
- seven fingers minus a third accurately. Measure it, then you know your route.
- b-247. In case you measure the altitude of β UMi (Kocab), the culminating star which is famous among us.

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- 215. You perceive it close to the coast, unless it juts out in the sandbars
- till the neighborhood of Maqdisüh. But you sight not the nountain in the rain or in the dust.
- The Arabs call it al-Hīrāb, but it has a stupid appellation in the languages of Zang.
- 218. I need to see it, I care not for its name, since no other mountain has the same shape.
- Sail to Maqdišūh and its country; enter it if you like to or continue
- to Markah, then to Barāwa, you shall come through in one day successively.

33 — [Description of Barāwa].

- Among other signs, there are seven sandbars off Barāwa.
- its harbor is on the forth sandbar, stop from anyside you come to it.
- Enter it safely, away from the rough sea and the reproach.
- You shall see nearby the harbor an isolated island, high and large.
- 225. which is an anchorage sheltered from all winds, in the opinion of the expert pilot. Learn its descriptions and infringe them not.
- 226. Circle the island and cast the anchor in Barāwa. The people will come to you before you reach them.
- Get in by right bow (47) with the south wind. If you
 desire to enter, go steadily.

34 - [Salling directions from Barawa to Malwan].

- If you desire not Barâwa, continue your journey.
 Sail along the coast if you like to.
- The shoreline is exceedingly irregular (48) from there till the end of Sofala, o experienced pilot.
- 230. I say till the end of Sofala, o master, be informed, God protect you from the harm of Darkness.
- Sail, by the Crown ≠, be not late, till you arrive to the bay of Šīkā, which is well known.

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[Chapter two] [Navigation from as-Sif af-Tawil towards as-Sawishil] [Hirab I, Hirab II, al-Gobb, as-Sawishil] [Altitudes of the Gaurda, description of the Magellanic clouds] [Salling directions]

31 - [Sailing directions from Muqhil's shool to al-Murut reef].

- Once you leave as-Sif at-Tawil behind you, the land deviates from the setting of Canopus ≠, it was reported to me,
- 207. to the setting of the Scorpion

 and Centaurus

 All this bay has soft winds (44).
- But between that shoal and al-Murūt, there is a mud-bank (45), o my interlocutor.
- 209. Al-Murüt is an isolated reef off (46) the coast, which wrecks the ship driven to it, take this information.
- Very often, you perceive not neither this reef, nor the shoal, o pilot — So, stay away from it —
- because they are ashore and the traveller is seaward far away.
- The coast between al-Murūt and Muqbil's shoal is divided into low sandbars, take my description.

32 - [Salling directions from al-Murůt to Barawa].

- 213. Past al-Murüt, lie some ridges of coherent sands till aş-Şanānī. Al-Murūt is 11 « stretched-arms » deep, approach it not.
- You might see there the mountain extending inland and not high.

30 -- [Sailing directions from st-Tabqat to as-Sif at-Tawil].

- If you steer from Tabqat to as-Sif at-Tawil, the coast is visible and you see easely your way.
- Count on yourself and consult a wise experienced pilot, expert in that route,
- in all you do, o intelligent man. Expect not anything good from a pilot ignoring the country.
- All pilots agree the route is completely clean from as-Sif at-Tawil to Muqbil's shoal (42)
- which has many crenulations with high spits (43).
 Learn the landmarks, o pilot.

28 - [Salling directions from Socotors to Haffini through the isles].

- 187. If you whish to pass through these islands, shape your course by the setting of Achernar, it is a good bearing.
- 188. These travelers routes leave Socotora at left.
- 189. Incline to [the setting of] Canopus

 and beware for fear the water might pour in the ship if you keep going straight forward on the original course,
- and so that the course to Hāfūnī becomes remote from its shore for sure.
- But whoever traverses the islands directly by the setting of Canopus≢,
- reaches the back of Samha and Darza. Beware of the islands harm.

29 — [Salling directions from Secotors to as-Sit at-Tawii through the open sea].

- 193. If you set your course through the open sea opposite to Socotora, leave this island at your right hand when crossing from Zafāri
- 194. till it disappears by the pole in the maritime horizon, and till you can not perceive it unless in fine weather.
- But these courses lengthen the route. Comply with your own experience, o companion.
- till you have the land in sight from Tabqat to ĞiriS, take my descirptions.
- 198. In there, a bar of sand lies, it is a bad bar, take my discourse.
- Anyway, it is nearer to the sea than al-Hīrāb's region: and it is known as Hīrāb of the sand-dunes.
- In Tabqat, you will find that the altitude of Arcturus and Hamal is five fingers in the obvious measurement.

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- Nobody else needs another description, unless he is a dull pilot, deprived of eyes.
- In case you missed the true Guards when the high Denebola is culminating (38)
- measure Kocab when culminating, it is correct in al-'Ahwar and involves not any mistake.
- Its original measurement at al-Ḥadd is twenty one fingers and a half exactly.
- It is correct, my brothers, I verified it and found it truly true, when it is graduated
- finger by finger without lie. I measured it four fingers in al-Hadra island.

[VIIII - Transoceanic lanes from al-'Atwah to as-Sil' at-Tawii]

27 - [Sailing directions from al-'Atwah to Secotoral.

- I go back to the sea route of al-'Atwah and Qalhat coast, o brother, to the success.
- Sail along the shore by the Handle of the Plough (39) till you reach al-Gumguma head, beware of the herbs.
- 181. Navigate by the setting of Canopus≠which is the basis for you, from the eastern side of that head
- 182. till you arrive at Maşīra. Then incline to the [setting] of the Scorpion ≠ in any direction you wish and calculate:
- if it is the 90th day of an-Nuruz, beware of the winds when the rains fall intermittently (40),
- 184. cross not the sea at the beginning of the currents of air(41). Cast the anchor and decide to stay.
- If you desire to sail seaward, set out, think and navigate.
- 186. Cross the sea from Zafari by the setting of Canopus≢, you shall see Socotora which guides you.

- was before, and decreases an equal amount without mistake.
- 158. This is not a measurement for steering upon for land, but I think it would be better to mention it, my brother.
- 159. because I left not any star in the heavens, I included it not in the guiding stars.
- 160. And Arcturus and Spica are taken as reference stars when Canopus rises in the heavens.
- Their altitude is precisely five fingers at latitude Polaris nine fingers as a rule, if Arcturus is the reference star;
- then Canopus' elevation would be eight fingers plus a quarter, understand my purpose.
- Whenever Polaris decreases one finger, Canopus' elevation increases, o my brother, Listen to me.
- 164. three quarters of a finger, as a net result of the measurement, if Arcturus is the reference star. Take my descriptions.
- 165. And, in a single measurement, Canopus' elevation is seven fingers at latitude Polaris seven fingers, what a wonderful art!
- Afterward, they increase in each head half a finger and one tenth, learn this measurement,
- because they are bright stars, I mean Canopus and Arcturus. Take my recommendation.

26 - [Steller altitudes at latitude Polaris 51/2 fingers],

- At latitude Polaris five fingers and a half, Acrux is visible. Henceforth, comply with my description,
- Agena's altitude is seven fingers as a rule, increases not and decreases not.
- Take latitude two fingers and a half, I mean Polaris latitude for sure.
- 171. At this latitude, the Cross' altitude is four fingers (37), I mean & Cru near the sea level, listen to me.
- 172 Also, Arcturus' altitude is four fingers too, I revealed the knowledge to you, o pilot.

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- and opposite to al-Hasis deep. God protect you from dirts and misfortune in it.
- 145. Sirius altitude is four fingers in the west, Capella's elevation is three fingers by experiment.

24 - [Stellar sititudes at Intitude Polaris 8 1/2 fingers].

- 146. Take the altitude of Castor and Pollux and that of αβ CMi, your reference stars being Castor and Pollux, o pilot.
- you shall notice that αβ CMi's altitude increases by one third of a finger in each Tiriffa. Improve your measurement.
- 148. Castor and Pollux' altitude decreases exactly by same without hesitation when αβ CMi are your reference stars.
- Let it be known, o master, that, in my description, for latitude Polaris eight fingers and a half, you shall find
- 150. the altitude of Castor and Vega identical to that of the fundamental measurement. Take my useful informations.
- 151. At the same latitude, the altitude of $\alpha\beta$ CMi is five fingers and a half without any diminution.
- 152. Know that the decrease and the increase in Sirius and in Castor and Pollux' elevation, are normal,
- 153. I mean half a finger for each head; I need not prolong my description.

25 — [Stellar altitudes of Arcturus and Spica at latitude Polaris nine fingers].

- The altitude of α Boo & α Vir is, at latitude Polaris nine fingers, in the rising, in my opinion.
- 155. six fingers for Spica and five fingers for Arcturus. This is obvious and clear.
- If Polaris decrease one finger, Spica increases half a finger plus one eighth of a finger. Be intelligent.
- 157. The reference star, Arcturus, stays five fingers as it

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 Steer for the coast without regret and enjoy the security and the safety.

[VII - Stellar altitudes in the sea]

22 - [Stellar altitudes when steering for land].

- There, Canopus and Arcturus' elevation is eight fingers, test it, o noble pilot.
- Regulus and Capella are visible in the heavens and their altitude is three fingers, o master.
- Also, Castor and Vega are seen and their altitude amounts to four fingers and a half. Listen to me.
- If you desire an accurate measurement for all this long route, o my companion.
- 135. take the altitude of Spica and Arcturus after you leave the breakers of the sea behind, and remember this elevation.
- You should truly find them, in their rising, six fingers exactly.
- Graduate these two stars according to the lengthening of the sailing distance in your voyage. Hold on them to enjoy success.
- You shall notice in that broad horizon that my measurements are correct. Forget me not.
- I mentioned these stars' altitudes in the rare 'Urgūza and in other poems too (36).

23 - (Stellar altitudes at latitude Polaris seven fingers).

- 140. Measure the altitude of Antares and Agena, at latitude Polaris seven, you obtain four fingers for each of them.
- There, Capella and Betelgeuse's altitude is three fingers and a half, measure them and be informed.
- 142. And you see that for both Antares and Rigil Kent the altitude is six fingers accurately.
- 143. But Acrux and Agena's altitude is seven fingers and a half at latitude Polaris seven

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- There, we precisely measured Pisces and Mirach, o my companion.
- Measured with one tablet, their elevation is five fingers and a half; I mean in the back of Socotora.
- There, the elevation of Mirach and Regulus is four fingers and a half normally.
- 117. These stars are interchangable (33) at Gardafun They have many positions in the west and in the east.
- 118. Measure them at Ğardafûn as you measure Polaris, in the west and in the east, without confusion.
- 119. But the setting of Pisces takes time in that season, my dear.
- The traveler complies (34) with these instructions and this is his duty.
- b-121. Take the altitude of Arcturus and Canopus ten fingers opposite to Ğardafün, o winner.
- 122. You may dispose of Polaris and Kocab: they constitute a good and sure measurment.
- 123. If you ask for the altitude of Canopus and Agena, it is equal to that of Polaris, learned pilot, and amount to
- four fingers plus (35); measure it and navigate as the expert pilot.
- 125. In Gardafun head and in Hill, comply with my instructions, you shall know the right course.

IVI - Transoceanic lane from Sind to Secotors and az-Zangi

21 - [Sailing directions from Sind to Secotors and az-Zaug].

- 126. If you set out from the coast of Sind to az-Zang, cross the sea and keep looking at
 127. the setting of Centaurus then the Scorpion ≠ till
- and shape your course westward, o my friend, steer on it for the land, and incline to the Crown≢,
- 129. you shall find in the open sea a broad horizon admitting many paths towards the shore. God protect you from shipwrech.

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19 — [Sailing directions from Ras-Madwar in Ğüzerät to as-Sif at-Tawil].

- a-99.If you set sail from Ras Madwar, navigate from Sümanât, be quite decided and sleep not.
- These are good harbors to get in and out for intelligent pilots.
- 101. Set out from them by the setting of the Crown≠ and the Scorpion≠, till the extremity of as-Sif at-Tawil, you approach
- Ğiris, which is the beginning of al-Hirāb in the north, know my conception.
- 103. Al-Hīrāb ends, o pilot, in Ğardīl in this place.
- b-104. But at Latitude Polaris one finger and a half, there is a tongue similar to al-Hīrāb, take my description.
- If you delay at the beginning of al-Mariza (31) one or two days, to cross it.
- 106. steer again on the setting of the Crown ≠, o pilot and regain the time you lost because of miscalculation.
- you shall certainly reach as-Sif and sail here close to the shore for sure.
- 108. I need not repeat the measurement, this is what was agreed upon as basis for you.

20 - [Stellar shiftudes in Socotors and Cape Guardaful].

- If you desire more details, follow the coastal route an take advantage of it.
- Measure Markab, you shall reach the back of Socotora.
- a-111. And if you notice the altitude of the handle of the Plough is five fingers, you would have done very good.
- The name of Markab is al-Farg with Gayn [in Arabic], said ad-Damīrī (32), without any fancy.
- in his Minhäğ exegesis, o pilot, and in another book as was reported to us.

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- Measure the altitude of Rigil Kent and Antares with one tablet, and admire the deed of my God.
- 84. At latitude Polaris six fingers and a quarter their elevation is seven fingers and a half, understand this fact in the art of navigation.
- because they had always been, at Mahâyam, at latitude Polaris nine fingers, four fingers.
- 86. So, their altitude increased by three fingers and a half. Measure it on the basis of this explanation.

17 - [Stellar altitudes of Antares and Agena].

- If you measure the altitude of Antares and Agena at Zağad, you obtain four fingers constantly.
- You should know the change in Antares elevation and understand it in comparison with that of Rigil Kent
- The motion of Rigil Kent and Acrux resembles that of Polaris for each finger,
- but it differs in fact in all the climate by one quarter of a finger. It is an amazing calendar.

18 - [Stellar altitudes of Sirius and Canella].

- In case your reference star is Sirius, Capella shall decrease when moving,
- in each headland four fingers plus; both stars are in the west, o chief.
- Also, if your reference star is Capella, Sirius shall increase by the same.
- Test them for a longer period, steer not for the land on them, verify them o recorder (30).
- At Mahäyam, their altitude is said to be two fingers, but you better add half a finger to this figure.
- When you reach latitude Polaris seven fingers, Sirius will stand five fingers plus.
- and Capella shall not increase or decrease above or under two fingers and a half, o praised pilot.
- Learn the principles of the measurement in the sea, teach them not to all the pilots.

15 - [Stellar altitudes of Rigil Kent and Acrus).

- Measure Rigil Kent and Acrux, which are known to all pilots and to me
- when the stars of the Crow culminate exactly with the mansion of al-Awwā;
- This measurement would be rather good when Acrux is in horizontality with Rigil Kent and can not be taken when it is in horizontality with Agena.
- Acrux altitude is three fingers three quarters at al-Hadd; γ Cru is then in high altitude in the heavens (26),
- there and its elevation is seven fingers and a half plus (27). The fundamental measurement should be taken on β Cru.
- But β Crucis' elevation is « excessive » (28), steer on it and tell all other pilots.
- Know that it is nine fingers and a half at Mâmī, graduate this difference intelligently.

16 - [Stellar altitudes of Antares and Rigil Kent].

- If you measure Antares and Rigil Kent at Mahāyam, you shall obtain four fingers as usual.
- till you come opposite the inhabited land (29), o vigourous pilot, at latitude Polaris six fingers and a quarter. This is my estimate.
- Antares stands constantly four fingers. Take the famous Rigil Kent, at his setting,
- its altitude would be six fingers and a quarter as the fundamental measurement. Measure it and listen.
- The measurement of the rising and setting stars is subject to controversy.
- It may be defective. Nobody knows it, but the expert erudite pilot who wrote about it,
- except in as-Sif at-Tawil, I mean the coast of az-Zanğ, o my friend.
- I mentioned these stars to teach you the celestial, spheres and the motion of these loudable heavenly bodies.

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- elevation is eight fingers, improve it as the prudent pilot (23) does,
- and know that Mizar becomes like Polaris conventionally.

13 - [Stellar altitudes of Polaris and Rigel].

- If the altitude of Polaris is ten fingers, when the elevation of your reference star, Rigel, at Mahāyam, is
- three fingers plus, measured by the tablets (24), reckon for the decrease in Polaris' altitude
- an increase of one finger in Rigel's elevation for each diminution of one sixth of a finger. I measured this, listen to me.
- But Capella altitude is ten fingers exactly without any decrease or increase. Take this utility.
- Measure it in all the coast of India. In this way, I intend to comply with the rules.
- But if your reference star is Rigel, Capella's altitude decreases in all horizons
- at every headland three quarters of a finger. Learn the rules of the Art of navigation about the fingers.

14 - [Stellar altitudes of Cappella and Beteigeuse].

- Know that Capella and Betelgeuse are visible at latitude Polaris seven fingers. Measure them precisely (25).
- Their altitude is eight fingers in the west, when measured with one tablet. Take this measurement and reckon it.
- Whenever Polaris decreases, you notice that Capella decreases, in the opinion of all pilots,
- two thirds of a fingers in the west. Learn it. I mentioned it in my poesy on the basis of my own experience.
- If the altitude of your reference star, Capella, is eight fingers verified,
- Betelgeuse elevation increases three quarters of a finger in each Tiriffa, o my colleague.

 the big number of Ğarbūb, birds and fishes, and current, o my assistant.

[III - Transoceanic lames from Concan to as-Sif at-Tawil]

11 - [Sailing directions from Dabut in Concan to as-Sif at-Tawit].

- In case you set out from Dābûl, follow my instructions and accept my opinion.
- Navigate from it by the setting of Sirius≢till Polaris becomes clearly
- seen, decreases not and increases not; then set course on [the setting of] the Crown ≠exactly,
- 43. you shall reach as-Sīf aṭ-Ṭawīl, safely and beautifully,
- between Ţabqăt and Muqbil's shoal. Move ahead and advance, if you perceive not the land
- because of the strength of the water and the wrong course, in case you are expert in that sea,
- whose signs had already been mentioned. Hereafter is the explanation of the measurements.

(IV - Stellar aititudes in indian points of departure)

12 - [Stellar altitudes of β γ Ari and Mizar].

- It is useful to improve the steerings for the land in all places. o pilot.
- First of all β γ Ari and Mizar; their measurements are valid in all horizons.
- But their altitude shows « deficient » values (20) in az-Zanğ coast — I previously mentioned this fact —
- and « excessive » ones in the second climate (21).
 Listen to my valuable discourse.
- Their altitudes at Dābūl resemble that of Polaris, i.e. eight fingers without any doubt.
- Whenever Polaris decreases one finger, they decrease half a finger. Measure them and listen.
- 53. If β γAri are your reference stars (22) & their

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23. if you steer to Güzerât or travel to Zafâri or Qalhāt.

9 -- [Sailing direction from Calicut in Malabar to Zanzibar].

- Whoever travels to Zanzibar, should make a decision about the wind and the courses.
- His sailing season is on the 70th day of the Nuruz (17) and his arrival at destination is on the 80th day.
- Whoever departs on the 90° day, reaches not his destination, unless it is in rare exceptional years.

(III — Transacenic lanes radiating from the Laccadives)

10 - [Salling directions from the Laccadives to the coast of Zanë].

- 27. When you had flown the flag of the Laccadives on your journey to az-Zang (18), take my advise:
- navigate due West≢and by Orion≢to as-Sif at-Tawil. Then steer (19) for the land while on your way.
- You shall find that the altitude of Canopus and Achernar is six fingers and a half, be informed.
- If you see you have exactly this elevation, point due west, hold on it, and hide not.
- Then, you perceive β γ Ari with Mizar in the west, take my experience;
- their elevation is four fingers and three other fingers added to them.
- Set your course according to these altitudes, when steering for the coast, be intrepid.
- Sleep not when you sail ahead for land, otherwise, you shall find yourself drifting ashore.
- This coast has no landmarks, but you always see al-Mungi.
- The master runs out seaward for a distance of twenty zams, o pilot, in the typhoon.
- When you observe a multitude of Mungis, beware of the land, you shall enjoy salvation.
- Every pilot has its own management, based on his knowledge of the courses, his insight,

- and set your course on [the settings of] Orion#and Sirius#according to the force of the wind during your voyage.
- a-9. In case the wind is favourable and fair (7), Kaffini is the obvious route, on a true course,
- along a distance of twenty zams (8) in all. Count them. Then, the west wind drops on the bow.
- at the northern ad southern sides of the Laccadives.
 This is what is meant by « al-fal » or reaching the midway of the route. may God protect you from the rough sea (10).
- b-12. In case the west wind is contrary to the course of the ship's destination,
- or the sea is rough, or, a typhoon(11) arises, or the rains fall, the pilot should manage in his trips.
- No need to tell the master what to do. Tack to and fro (12), you will catch the wind. Hold on your course.
- Leave not polaris. Ply off and on (13) towards the north, if you had not passed the latitude three fingers exactly,
- c-16. Which is that of the island of Kaffini, taken by the naked eye. The positive evidence for you
- is the fact that the altitude of Alkaid and Hamal amounts precisely to seven fingers minus a quarter of a finger,
- and that Arcturus and Hamal appear in the east and have an elevation of six fingers plus (14),
- and if their elevation is six fingers minus (15), measured with the naked eye, you would be proceeding to the island of Malaki and the rain will fall on you.
- In case you are cought in the shower, keep on the bow (16), leave not Polaris and tack about seawards,
- so that you might avoid the damages of the rains, rough sea and seasons.

8 - [Sailing directions from Calicut in Malabar to South Arabia].

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AS-SUFALIYYA

[Chapter One]
[Transoceanic hases across the Arabian Sea]
[Their convergence towards as-off at-Tavil]
[Stellar altitudes connected to them]
[Sailing directional

5 -- (Thanks be to God).

- Thanks be to God who brought the mankind into existence from nothing. God be exalted, the Eminent and Sublime!
- The human race failed to know his qualities. How many bounties of His do we sight in the sea!

6 - [Subject of the 'Urguza]

- He vouchsafed us graciously the measurements and the sailing directions (5), we use when navigating at dawn and before daylight.
- 4. from the coasts of Calicut, Dābūl, Ğûzerāt, Diūl,
- Harāmīz and 'Aṭwāḥ, Follow the routes made by my Creator, o my friend,
- When you proceed to as-Sawāḥil, to the regions of al-Qumr and to Sofala. Listen to me and sail

[I - Transaccanic lones radiating from Malaber]

7 - [Sailing directions from Califort in Malahar to the Laccadives].

 from Calicut's coast to the Laccadives, from latitude Polaris two fingers to latitude Polaris three fingers (6),

IN THE NAME OF GOD, THE MERCIFUL AND BOUNTIFUL

IPROLOGUE1

1 -- [Thanks be to God].

Thanks be to God, God of all peoples. God's blessings and peace be with Muḥammad, his family and companions, all!

2 - [Name of the 'Urguza].

This is the 'urğūza, called « AS-SUFALIYYA ».

3 - [Scope of the 'Urguza].

Its matter implies the knowledge of the courses (1) and the measurements (2) from Malabar, Concan, Guzerāt, Sind, 'Aṭwāḥ, to as-Sif aṭ-Ṭawil, and from as-Sif aṭ-Ṭawil to the regions of as-Sawāḥil, az-Zang, Sofala, al-Qumr and its islands. It includes also advanced learning about everything in all above countries till the end of the land in the South; the mention of measurements used by the pilot to observe the decrement and increment of all points of the compass (3); and the description, along the routes, of the measurements, the sailing directions, the courses, the habitants of the countries and their kings, their sailing seasons and their voyages as it befits the place and the journey to it.

4 - [Author of the 'Urginal.

It is composed by the fourth (4) of the three [lions of the sea], the pelgrim of the two Holy Mosques, Sihāb ad-Dīne Aḥmad bin Māğid. the mercy of God be upon him. Amen.

PART TWO

AS-SUFALIYYA

« THE POEM OF SOFALA »

Translated from the arabic established text

of Sofala with the « harbor of gold » itself is ruled by the king of Kilwa (verse 573 ET). That is why — at least apparently — he focused on the maritime links between Kilwa and Sofala through al-'Ahwār or across the open sea and on the sailling seasons from Kilwa to Sofala and vice-versa. One paragraph of 23 verses is consecrated to a poor sketch giving the names and the latitudes of some place located between Kwāma bay and Wāzah: Sofala, Sitāwa, Manāra, southern Mulbayūni, Malābatt, Saduwa islands with Wašīkā inclusively. The remaining verses reports some vague or imaginary so called details about the populations and the kingdoms at the borders of the country of Sofala lying at the limit of the land's end in the South.

5. Navigation between the East African coast, al-Quar and the islands

The last part of as-Sufaliyya outlines the navigation between the islands lying seaward of az-Zanğ, al-'Aḥwār and Sofala. First, the location of these islands is briefed. Then, the altitude of the handle of the plough is given for five of them: al-Qumr, Anğaziğa, Damūti, Sa'da and Lingānī. Afterwards, the sailing directions and seasons between the East African Coast and the Isles are developed.

As-Sufaliyya ends by a short epilogue, praising its science, giving the number of verses in it and asking God to bless the Prophet.

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2. Navigation parallel to Hiráb I and II, al-Ğubb and as-Sawābil

The second part of as - Sufaliyya deals with the navigation from as-Sif at-Tawil to as-Sawāḥil inclusively. It develops the sailing parallel to the shorelines of Hīrāb I and II, al-Gubb and as-Sawāḥil. The prominent landmarks or physical features in the sea or in the shores are specified and enumerated, such as the reefs, the banks, the shoals, the bays, the creeks, the mountains etc... The main harbors and anchorages or islands are examined one by one: Barāwa, Malwān, Batta, Wāzīnā, Lāmū, Kitāwa, Melinda, Zalwilūl, Mangi Hazan, Mombasa and Wāsīnī. The sailing directions are indicated gradually. Sometimes the altitudes of bright referencestars are given. It should be noticed, too, that the elevation of the Guards and the description of the Magellanic Clouds are detailed here and constitute two highly important paragraphs in this section.

3. Navigation parallel to the literal of az-Zang and al-'Alawar

The third part of the Poem of Sofala treats the navigation parallel to the littoral of Zang and al-'Ahwār. The littoral of zarg and al-'Ahwār. The littoral of zar-Zang extends from latitude two fingers of the Guards to latitude ten fingers of the handle of the Plough where al-'Ahwār begins and streches till latitude 7 fingers of the handle of the Plough. As in section II, the landmarks and sea features such as the mountains, headlands bays, reefs, shoals, shallows, banks, embankments, islets are described in some details. The ports, harbors and their islands are enumerated from north to south: Zanzibar, al-Mašwī, Sundā including al-Kāfīr, aŝ-Śarqa', Wāmalli, Flūluwa, Manfia, Kilwa, Haswāndū, Waqūla, Kilwa Tūnī, Šang Šanguwa, al-Ḥanaš, Kilwa of the kings. Stellar altitudes of the Guards, the handle of the Plough and some bright stars are given in some instances. In all cases, the sailing directions are indicated.

4. Navigation parallel to the coast of Sefala

Part four of as-Sufaliyya is devoted to the navigation of the country of Sofala, that is from latitude seven fingers of the handle of the plough (i. e. Kwäma bay) to latitude two fingers (the island of Wäzah). In fact, Ibn Mägid believes that the coast

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the residence of the king of Zimbawi is a center of gold and a region of slave traders. Another pretends Ibn Mägid heard an original news without telling what it was. Two others repeat literally the verses 29 and 30 of folio 92 r (521 and 522 ET). The remaining three are meaningless.

So far, the false verses had been identified. It was shown they involve anachronism, repetitions, errors and a very limited number of meaningless verses. All are then superfluous and none of them would leave any gap if deleted. This is an additional proof of their falsity and intrusion. Our immediate obligation is to cut them out and obtain a neat Sofaliyva. free

III — The « unfaisified » Sofaliyya

The true Sofaliyya of ibn Māǧid is a well structured poem. In it, the East African Coast is divided into three major zones, within recognized limits given in fingers of latitude: first fingers of Polaris at the northern end, then fingers of the Guards in the middle, and finally fingers of the handle of the Plough in the South. Again, these latitudinal zones are subdivided into minor geographic « belts » referred to by their local appellations. A prefatory section precedes them all and explains the maritime links between East Africa and the Indian Ocean Coasts.

1. Transoceanic lames leading to East Africa

from falsification.

At the beginning of his poem, Ibn Mäğid shows how the ships sail from the indian shores and reach the northern part of East Africa, namely as-Sīf aṭ-Ṭawīl, through transoceanic navigation. In fact, he ignores the Indian Ocean east of Cape Comorin as well as the departure from Aden. He confines his presentation to the coasts of the Arabian Sea. Five principal « lines » of navigation are outlined: the transoceanic lanes radiating from Calicut, Dābūl, Sumanāt, Diul-Sind and al-Atwāḥ. All these sea routes converge either towards Socotora, then to as-Sīf aṭ-Ṭawīl, or, directly towards as-Sīf aṭ-Ṭawīl. The sailing directions — points of the compass — are given for each lane. So are the altitudes of the stars, visible when sailing along.

some heads in India and Arabia: the context supposes they are in Bears' fingers, whereas they should be in Polaris' fingers, and so on. Again the ignorance of the inserter is perceptible and in full contradiction with the knowlege of Ibn Mågid. Thus, apart from any arguments given to point out the fallacy of all above insertions, they turn out to be unreasonable and illogical.

3 --- Varia

Insertion 16 is an inconsistent and vulgar display of mythical phenomena and of ordinary performances, considered as achievements, attributed to Ibn Māgid who is humiliated, and by whom? by himself! The words and the style are not his in this passage which is intruded in the sailing seasons of al-Qumr and make the intercalation irrelevant.

4 - The Nile's branches

The subject of the Nile's branches is amazing. It is reported two times: once in f.93r, 11-16 (between verse 559 and 560 ET), and in f. 94r, 22-27 (verses 596-600) that means after 36 verses in the original work and in the English translation. Now, which presentation should be retained? Obviously, the second one, because it is connected to the so called Nile's Mountains in the precedent verse (595 ET) and in harmony with the views of the Arab Geographers, while the falsified passage is alien to the sequence of the speech and confuses the Nile's branches, their names and their arrangement.

5 —The Land's signs

The subject of the land's signs is also very strange. Ibn Māġid reports the informations given to him by an expert pilot about the islands « at the east » of al-Qumr, relates the « wave of the cross » and describes the isles' distribution throughout the sea. Here comes the insertion 13 about the birds and the fishes, so numerous that the pilots might believe they are in the sea (sic) or have mountains under them in the sea (sic), while the logic conclusion should be they are approaching the land.

6 -- Miscellanea

The last five insertions compris seven verses. One of them splits a clause into two parts and interposes between them that

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Moreover, it is said, in insertion 6, that the invincible Portuguese improved the Navigation. In insertion 10, the Portuguese science is praised again. So it is in insertion 17. All these allegations are in absolute contradiction with the character and pretention of Ibn Magid who always considered himself the unique genius of his time in navigation, and an outstanding author for the future. « I swear twice by God, he said, it is most probable, in my deep hard think, that the pilots will leave all the writings of the ancient and new navigators and rely upon my says in poetry and prose, to improve themselves to the extreme and final degree » (1). Also, he pretends that « if his inventions for steering ahead for land prove to be true, he would feel alive in his grave; if anything is wrong with them, he wouldn't be mistaken, but a shake would have moved the stars in the sphere of the heavens, whithout any doubt » (1). Would such a man recognize any superiority for anybody else? I don't think so.

2 - The Stars of navigation

The subject of some stars of navigation is incredible too. Eleven verses, in three insertions, are consecrated to it. Two of them say that Arcturus and Spica are seen from Zanzibar to the island of al-Mašwi. They are meaningless repetition, since the measurements of these stars and the latitudes where they may be used, have been given in details in verses 154-167 of the English translation.

Two other verses tell about the coastal navigation by Canopus and stress at the same time upon the necessity of anchoring day and night near any reef encountered. They cut a clause into two halves: second hemistich of verse 470 ET and first hemistich of verse 471 ET. Besides, the first verse repeats the idea of the 2d hemistich of verse 468 ET in his first hemistich and takes, word for word, the 2d hemistich of verse 470 ET.

The seven last verses are intercalated in a long passage explaining the latitudes — by means of the Bears — of different islands between Madagascar and the African coast. They give a wrong reference to al-Hāwiya and mention the latitudes of

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⁽¹⁾ Al-Fawa'id, p. 162, 1, 6-9

⁽²⁾ The Golden Poem, verses 7-8

If the insertions are arranged according to their subjects, they fall in six items enumerated as shown in the schematic outline below.

SUBJECTS OF THE INSERSIONS

| Subjects | n.° of verses | insertions n.º |
|------------------------|---------------|------------------------|
| 1. Franks | 69 | 3-6-7-8-9-10- 14-17 |
| 2. Stars of navigation | 11 | 1-2-11 |
| 3. Varia | 9 | 16 |
| 4. Nile's branches | 6 | 4 |
| 5. Lands's signs | 4 | 13 |
| 6. Miscellanea | 7 | 5-12-15-18-19 |
| Total | 106 | |

1- The Franks' subject

It is obvious that the main subject of the insertions interests the voyages of the Portuguese to India. The simple mention of these events, occurring after 1497, in a poem composed before 1489 (895 H.), is a chronological misplacing. It is an anachronism that proves the ignorance of the inserter.

Besides, the dated events, related in the falsification of as-Sufaliyya, came about in 906 H./1500 A.D. (arrival to Calicut-may be Cabral? — and definite settlement of the Portuguese in India?) and in 919 H./1513 A.D. (The Franks' expedition — double attack of Aden and the Great d'Albuquerque?), that means when Ibn Māğid was not only retired long ago inside Arabia, but certainly dead. This is a fantastic account, not only an anachronism. The extravagant fantasy of the falsifier is striking also when he pretends that the Portuguese went to the island of Wāzah in 900 h./1495 A.D., stayed two years there, then proceeded to India, or when he tells that they wrecked off the coast of Sofala on the feast of St. Michael, i. e. on the 8th day of November in the East.

These evidences imply the existence of an alteration in as-Sufaliyya. This modification is materialized in the uneven addition of 106 verses throughout the original text. It forms a falsification involving the insertion of extraneous passages which should be identified in a next move.

II - Identification of the extraneous passages

On the basis of various criteria, it was possible to recognize and pick out 19 insertions from as-Sufaliyya in the photocopy. They are shown in the list below.

LIST OF FALSE INSERTIONS

| _ | | | | |
|-------------------------------------|---|--|--|-------------------------------|
| Insertion | number of false | | position in the | position in the english |
| n.° | verses | | photocopy | transla. between |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | 2 2 4 6 1 29 1 9 1 22 7 1 4 1 2 | Arcturus & Spica Canopus The Franks Nile's branches Gold's center The Franks The Franks The Franks The Franks The Franks Stars altitude Meaningless Land's signs Franks Sailing season | 89v, 13-14 91v, 7-8 92v, 4-7 93r, 11-16 93r, 19 93r, 24-34 to 93v, 1-18 94r, 2 94r, 12-20 94v, 13 94v, 25-34 to 95r, 1-12 95r, 24-30 95v, 14 95v, 20-23 95v, 29 95v, 32-33 | 350-351 470-471 525-526 |
| 16 17 18 | 9 2 2 | Varia The Franks Arrogance | 96r, 4-12 96r, 15-16 96r, 19-20 | 688-689 690-691 |
| 19 | 1 106 verses | Claim | 96r, 22 | 692-693 693-694 |

author — may be more — composed the extraneous interpolated passages whose heterogeneity betrays them: their dissimilarity keeps them isolated and their alien expression and subject set them apart among the authentic verses.

Every time a group of verses is added, a cut is noticed, with a style and a spirit different from those of Ibn Māğid, and, often, with meaningless presentation of incorrect events or void phraseology or inconsistent sentences. Looking over f. 94 v and 95 r, the reader feels lost from line 25 of f. 94 v to line 12 of F. 95 r: he was following Ibn Māğid in his description of the « Gold Center » near Sofala and he suddenly found himself going about, back and forth, from Portugal through the Atlantic and the Indian Ocean to Malabar; then put back in Sofala and told about the « islands »; then making a roundabout on the indian and arabian coasts and in the « unknown seas »... (f. 95 r, 24-30); then brought back again to the « islands ».

So, the disruptions are obvious and throw as-Sufaliyya into an abnormal suspect disorder and confusion, not found in any of Ibn Māġid's 24 known nautical poems, that never digress from their fundamental subject: the only kind of ordinary departing from the essential aim in them would be one verse or more in which Ibn Māġid is delighted to show his arrogance, his pride of himself, his skill or his science, and his disdain to other pilots. Apart from this euphoria, any poem of his deals entirely with a definite nautical matter assigned to it. Ibn Māġid can not derogate in as-Sufaliyya from the standard exposition, he freely compelled himself to follow in all his versified writings.



In a partial conclusion for this section, it must be admitted that some undeniable facts have been revealed: first, as-Sufaliyya was composed a long time before the Portuguese went to India; second, Ibn Māģid was too old and retired inland in Arabia when they set sail to the Indian Ocean; third, the Arabs in Arabia knew nothing about the Portuguese before their coasts were attacked by the Franks; fourth, the number of verses of as-Sufaliyya is 761 verses incontestably; fifth, and last, the structure of the Poem of Sofala is deeply disturbed in the photocopy of Leningrad.

itself — even if it is very near — is never tolerated and this is not the case here either.

This way of giving the number of verses of a poem is used by Aḥmad bin Māġd in al-Ḥāwiya, too. He said in the chapter XI of that poem, in the verse 95: « All of it (al-Ḥāwiya) is made of one thousand and eighty; it exceeds that (=1080) by two verses. Then, the number would be complete »: (ĠAMĪ·UHĀ ALFAN WA TAMĀNĪN'ATAT; TAZĪDU BAYTAYNI LIDĀKA, QAD WAFAT ». Thus, the determination of the exact number of verses and the wording are similar in both cases of al-Ḥāwiya and of as-Sufaliyya. The unique divergence is the different number of verses mentioned.

So, there can be no doubt about the authentic verses of as-Sufaliyya, and it is established definetely that they are 701 only, and clearly.

Consequently, the number of verses of as-Sufaliyya had been alarmingly exagerated and 106 false verses have been inserted between the 701 true verses to make the 807 verses included in the photocopy.

5. The doubtful unity of as-Sulfaliyya in the photocopy

When examining closely as-Sufaliyya in the photocopy of Shumovsky, the reader feels unmistakably the breaks in the continuity of the poem. The striking example among many others is the folio 93. The subject dealt with in it is Sofala. All of a sudden comes a long digression of 29 verses about the Franks, their country and the northern lands, preceded by two shorter digressions of one verse and 9 verses explaining the branches of the Nile mentioned in due place later on: that means 39 dubious verses out of a total of 71 for the entire folio

Thus the verses of the poem of Sofala fall into two classes: a coherent group elucidating the navigation along the East African Coast and a disparate and disconnected category inserted unequally between the first one.

Nothing is surprising in this broken structure of the sequence of the original 701 verses of Ibn Māğid: a new

1498 A.D./904 H. — Lisboa 1499 A.D./905 H.), or, the expedition of Pedro Alvarez Cabral in 1500 A.D./ 906 H., or, the expedition of Da Nova in 1501 A. D./907 H., or., the second voyage of Da Gama in 1502 A.D./907 H.

This means that the Arabs in Yemen, Mecca or elsewhere in Arabia, never heard any news about the Franks (Portuguese) until the end of the month of Sa'bān 913 H./1507 A.D. and until they fought against them in 919 H./1513 A.D. that is in a date when Ibn Māğid was 80 years old or dead, and a long time after the composition of as-Sufaliyya which could not logically mention any news not known throughout Arabia even by the contemporary chroniclers.

4. The number of verses in an-Sufativea

Another evidence which should be stressed upon, is the number of verses in as-Sufaliyya. When counting the photocopy of Shumovsky, the number found is 807 verses, in spite of the number 805 in the Russian translation.

Anyway, the true number of the verses of as-Sufalivva is only 701 verses as stated, word for word, in verse 17 of page 96 r (691 of the ET): « It (as-Sufaliyya) has seven hundreds, it exceeds them (the seven hundreds) by one verse. Learn it from Ahmad as-Sa'di», The first hemistich of this verse is composed. grammatically speaking, of two clauses: one is formed of the pronoun « it » — HI — whose antecedent is as-Sufalivva in verse 13 of the same page 96 r (689 of the ET) and the cardinal number « seven hundreds » - SAB'U MÂYA -; the other contains three terms: « one verse » - BAYT -, the verbe « exceeds » -- TAZÎDU -- whose subject is as-Sufaliyya and « them » — 'ANHA — where the pronoun refers to seven hundreds. These two clauses should be separated by a coma or by a full stop in the following way: « HI SAB'U MAYA, BAYT TAZĪDU 'ANHÂ ». It is absolutely wrong to put it like this: « HĪ SAB'U MĀYA BAYT, TAZĪDU 'ANHĀ »; it is seven hundreds verses, it exceeds them, because this construction would be so vague that it would mean nothing and would not indicate any number. The rule in Arab poetry is to give the exact number or to abstain from alluding to it, the approximation

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al-Muharram, the news, disseminated in Yemen, said that 18 Portuguese ships came to the city of Aden. The Sultan 'Amer sent an army to Aden, and instructed the yemenites to attack the Franks in the prayers in all the mosques and in the friday's sermon. The Franks arrived at Aden on friday, the 7th of the month of al-Muharram. The Prince enjoined the inhabitants of Aden to neglect them, reinforce the defences in the town and be firm. Later on, the Franks set ashore with ladders they made and put on the lowest part of Aden's enceinte. They climbed on the ladders and some of them entered the city. Then, the Prince gave the order of the counter-attack and the counter-assault began. The ladders were cut. Some Franks were killed and four captured. The Franks were defeated by the bounty of God and they were convinced they were unable to conquer Aden. So. they set their ships out of the port because they were afraid of being assailed. They sailed in the direction of Bab-al-Mandab Strait, passed opposite to Muha and al-Bag'a, but did not enter any of these anchorages. They proceeded to Hudayda and tried unsuccessfully to control it. Then, they went to Kamaran, occupied and plundered it at the beginning of the month of Safar, and killed the Sultan's representatives including the noble Muhammad bin 'Abdul-'Aziz bin Sufyan. Afterwards, they returned to as-Sihr... After the sack of Kamaran, they Sailed to Aden. Two of their ships steered to Zayla', burned all the ships they found in its harbor and rejoined their companions, gone to Aden. They failed to submit that town. They gunned it, burned some houses and killed some people in the market. The inhabitants of Aden were engaged in a violent war against the Franks, and wounded many of them. The muslims won the victory by the bounty of God. The Franks left Aden's harbor on the first day of Gumāda al-'Ūlā » (1).

Thus, the chronicle of Ibn Mutahhar, consecrated to the great events occurring after 900 H. (2), says nothing about the first voyage of Vasco da Gama (1457 A.D./903 H. — Melinde

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⁽¹⁾ Ibn al-Muṭahhar, f. 15 r. 7 to F. 15 v. 7.

⁽²⁾ The full title of the work is: « The Peace of the Soul, on the great rebellions and conquests occurring beginning 900 H $_{\rm P}$.

He was still alive in 906 H./1500-1501 A.D., and far away from the Indian routes. He showed no sign of existence after that date

This patent testimony of Ibn Māğid himself excludes the possibility of any meeting with him outside Arabia-where he retired-after 900 H./1495 A.D., and any mention by him, in his precedent writings, of any historic event occurring in the future, that is after the beginning of the 10* century of Hegira.

3. The dates of the first Portuguese voyages to India

The portuguese voyages are mentioned in the Arabic Chronicles contemporary with them. It is not necessary to go beyond 920 H./1514 A.D., since lbn Māġid was certainly dead long before that time limit, even if it is supposed he had 75 or 80 years or more, when he departed (born 825 H./1421 A.D.).

I believe it is enough for the purpose of this brief analysis and for the period 900 H. to 920 H., to review the chronicle of Ibn al-Mutahhar, a yemenite historian (+ 1048 H./1638 A.D.) who is expert in the events of this century. He gives the following informations about the Franks in the Indian Ocean and outside it.

He mentions the conquest of Andalusia by them (1) for 906 H./1500 A.D. We are not interested in that subject.

He says about the historic events of 913 H./1507 A.D.: « The Prince Husayn left for the port of Deccan because of the Franks, who appeared in the sea, committed piracy and took every ship by force. In that year, they conquered and subjected the town of Hurmūz. They guaranteed the security of all people they encountered, including the muslims, the mariners and the travelers. This news reached Yemen at the end of the month of « Śa bān » (?).

The events of 919 H./1513 A.D., regarding the Franks, are stated in these terms: « The year 919 H. began. In the month of

⁽¹⁾ Ibn al-Muṭahhar, fl. 6 v, 3.

⁽²⁾ Ibn al-Muțahhar, f. 11 v, 15 to f. 12,4.

Many hegira dates are available in his poems. The latest three, that is 895, 900 and 906 ('), are accompanied by a detailed description of the last years of his life story.

In 895 H./1489 A.D., he said he had already spent fifty years in the observation of the stars of navigation (*). He described the results of his experience for the benefit of the pilots and added that, after that long time in the sea, his old age was obviously noticeable and he himself was mentally irresponsive (*). This half a century of arduous job on the ships and on the seas is referred to in the epitome of « Kitab al-Fawā 'id » (*).

In 900 H./1495 A.D., he reported in his poem « The Division of the Water Area », that all the hairs on his head were totally white and he was expecting to die at any time (*). In the poem of the « Jewel of the Jewels », he stressed he had by far exceeded the age of 60 years and reached the end of his life: he said he was then as remote of his youth as Arcturus, Spica and Vega were distant from the earth (*). This is evidently a way to place emphasis upon his advanced age and inactivity at his usual work. In other words, his career in navigation ended in 900H., and, from now on, he was unfit or unwilling to exercise any maritime duty.

Observing the logical sequence, it should be concluded that lbn Mågid left the sea and lived on land after 900 H. He might have decided to spend his last days either at home in Mecca or in Şa'da or at his birthplace in Julfar. Any other residence would be highly hypothetical.

-Y.o. - 15 -

^{(1) 895} is the date of the amendment of the « Golden Poem », and that of the composition of the « Poem of Mecca » and of the abridgment of al-Fawā'id; 900 is reported in the poem of « The Division of the Water Area » and in that of « The Jewel of the Jewels »; in 906, the « Poem of the Ouintets » was written.

⁽²⁾ The « Golden Poem», verse 9.
(3) The Poem of Mecca, verse, 151. « Qalb », in Arabic, means heart or intellect in the time of Ibn Māgid.

⁽⁴⁾ Al- Fawa'id, pp. 202 p 13-14.

⁽⁵⁾ The « Division of the Water Area », verses 202, 214.

⁽⁶⁾ The « Jewel of the Jewels », verses 1-2,

1. Date of the composition of as-Sufaliyya

In the poem of Sofala itself, nothing is said specifically about the time of its composition.

Nevertheless, the amended version (¹) of the « Golden Poem » of 895 H./1489 A.D., mentions 16 poems which have been composed before « aḍ-Dahabiyya ». As-Sufaliyya is cited by name among them (²). So, it is absolutely sure that the poem of Sofala goes back to a date somewhere in the period preceding 1489 A.D., or eight years, at least, before the first voyage of Vasco da Gama to India, in an initial approach.

But the original version of the « Golden Poem » was composed before 880 H./1475 A.D., since this poem is referred to in the develeped book of al-Fawā'id, written at the same date, and that Ibn Māğid himself said he explained ad-Dahabiyya in 880 H. (¹). This implies that as-Sufaliyya is earlier than 880 H., or, written 22 years before da Gama left Portugal in 1497!

On the basis of this evidence, Ibn Mägid could not possibly have reported in as-Sufaliyya, any material event or incident, not yet happened and occurring after 880 H./1475 A.D., or, with extreme indulgence, after 895 H./ 1489 A.D., that is, in both cases, a very long time after he had finished his poem.

2. The old age or the death of Ibn Magid

In like manner, the reference to the old age of Ibn Mäğid or to his death, shows accurately he could not have contacted the Portuguese or have known anything about their voyages.

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⁽¹⁾ The « Golden Poem » was amended and the developed « Kitāb al-Fawā'id » was abridged at the same time in 895 H./1489 A.D. cf. « Kitāb al-Fawā'id » p. 167, 393-394 which is in fact an epitomy or a short new edition of the long version.

^{(2) «} The Golden Poem » or « ad-Dahabiyya », verse 162.

^{(3) «} al-Fawa'id », p. 18.

PART ONE

The fakification in the Poem of Sofala

In the past three decades, as-Sufaliyya was believed to be wholly a true poem of Ibn Māğid in the form and in the number of verses, presented in the photocopy of Shumovsky. It would comprise the 805 verses translated into Russian (*). It had been given an intrinsic value concerning the arab art of navigation, and a rather conjectural extrinsic value, derived from what Ibn Māğid was supposed to have done or said regarding the Portuguese and their navigation. To the best of my knowledge, none of all the scientists who dealt with it ever doubted or thought the photocopy of as-Sufaliyya might include any counterfeit verses, in spite of the obvious evidences pointing out the dubious passages, when the poem and its circonstances are carefully examined.

I - Factual Evidences of the false measures

These evidences may be outlined under five topics: the date of the composition of as-Sufaliyya, the old age or the death of Ibn Māgid, the dates of the first Portuguese voyages to India, the number of verses in as-Sufaliyya, and its doubtful unity in the photocopy.

⁽¹⁾ Shumovsky, p. 45.

ly by the fact that it failed to free as-Sufaliyya from the scribal errors and defects and from spurious verses inserted between the authentic ones. These gloomy aspects may be due partly to the dry, sometimes apparently obscure thoughts of lbn Mågid and his sober, concise and often elliptic technical style; and partly to the fact that Shumovsky himself is presumably not thouroughly used to deal with arabic navigational poems which differ completely from the classic poetry.

In 1960, Myron Malkiel-Jirmounsky translated the Russian text of Shumovsky into Portuguese. Many scientists from Portugal, Spain, France and England worked on both the Russian and Portuguese versions. As a result, false concepts spread out among scholars and ordinary readers about the personality of Ibn Māğid, his knowledge or his science, and his contacts with the Potuguese.

For the above reasons, I thought the photocopied poem of Shumovsky must first be cleared up of falsification and defects. Then, its translation and introductory analysis would be of real significance. This is what I did my best to achieve. I am sure much more should be added. I am convinced, too, that it would be quite beyond the power of a single person to say all that must be said upon such a wide subject, in one relatively short account. Neverthless, I hope this work would give an initial solid basis and preliminary comments for further studies.

PREFACE

As-Sufaliyya comes next to the first and most important writing of Ibn Māġid, I mean «Ḥāwiyat al-'Iḥtiṣār fī 'Uṣūl 'Ilm al-Biḥār», or, the Science of the Seas, a Compendium of basic elements, which deals with sailing in the Indian Ocean, the Red Sea and the arabian Gulf, and along their coasts.

The title of as-Sufaliyya implies literally that the shores of Sofala alone are treated. In fact, Ibn Māgid extends the scope of his poem to all East African Coasts from cape Guardafui to Southern Sofala.

In 1918, some scholars⁽¹⁾ knew that a unique manuscript, containing three poems of Ibn Māgid, including as-Sufaliyya, existed in the Oriental Institute in Leningrad (The Asiatic Museum of the Academy of Sciences).

In 1957, T. A. Schumovsky published it in photocopy and into a Russian translation and called it «Three Rutters of Ahmad Ibn Mägid, the Pilot of Vasco da Gama...». This edition was a hard task. When looking into this book, I was struk by the misleading title, by the numerous incorrect readings, misunderstandings, improper interpretations and mistakes, and ultimate-

⁽¹⁾ Kratchkovsky and Ferrand.

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AS-SUFALIYYA « THE POEM OF SOFALA »

ARABIC NAVIGATION ALONG THE EAST AFRICAN COAST IN THE 15th CENTURY

by AHMAD IBN MÄĞID

(825 H./1421 A.D. - 906 H./1500 A. D.)

Translated and Explained
by

IBRAHIM KHOURY

1989

فهرس مواد الجزء الثاني

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